Integrating Total Quality Management Philosophy in Greek Higher Educational Institutions

D. Belias, A. Koustelios, K. Varsanis, D. Kyriakou and L. Sdrolias

Total Quality Management (TQM)

The focus of Total Quality Management (TQM) is on customer satisfaction ad service quality (Talib et al. 2011). Its advocates state that implementation of TQM practices leads to improved quality of products and services, reduction of costs, increase of customer and staff satisfaction, and financial profits (Powel 1995; Talib et al. 2011). However, there is serious argumentation against TQM, especially in terms of costs and other obstacles, such as management time consumption, paperwork, formality, and failure to address the needs of certain organizations (Powel 1995; Talib et al. 2011).

In contrast with past practices which focused on quality control and were result-oriented, TQM is a process-oriented organizational philosophy focusing on quality management and aiming at customer satisfaction through the improvement of product and service quality (Mehra et al. 2001). It is essential that there is a quality culture, so that all stakeholders realize that it is a dynamic, rather than static, process requiring continuous efforts.

D. Belias (✉) · A. Koustelios
Department of Physical Education and Sport Science, University of Thessaly, Trikala, Greece
e-mail: dbelias@pe.uth.gr

K. Varsanis
Department of Business Administration, Technological Educational Institute of Western Macedonia, Kozani, Greece

D. Kyriakou
Department of Economic Sciences, Aristotle University of Thessaloniki, Thessalloniki, Greece

L. Sdrolias
Department of Business Administration, Technological Educational Institute of Central Greece, Psachna, Greece

A. Kavoura et al. (eds.), *Strategic Innovative Marketing*, Springer Proceedings in Business and Economics, DOI 10.1007/978-3-319-56288-9_13

Literature confirms that the main criteria for determining quality in service organizations include leadership, information and analysis, planning for quality, human resource utilization, quality assurance of products and services, quality results and customer satisfaction (Cornesky et al. 1991, p. 76).

After an exhaustive review of studies on TQM practices, Talib et al. (2011) concentrated on the key practices of TQM in service industries. They discuss the positive results which derive from the 49 TQM practices, without failing to highlight organizational performance and service quality. Implementation of TQM was connected with quality of conformance and customer satisfaction, while it was found that organizational knowledge and skills and job satisfaction were related to the engagement of the staff. Similarly, Trivellas and Reklitis (2014) have found that job satisfaction is directly related to staff's values and opinions about the working conditions and the climate, human relations and communication, security and supervisory support, teamwork, and flexibility.

However, several issues emerging during the processes of development of the quality improvement and measurement of the results might hinder TQM successful implementation. According to Talib et al. (2011), the most frequent issues found in the literature are leadership inability and inconsistent organizational culture. Inefficient resources and failure to change organizational culture, lack of training, engagement or commitment, resistance to change and lack of motivation, unrealistic expectations and failure to inform the stakeholders about the programme, lack of strategic planning and structural problems were the main reasons for the failure of TQM in service industries. Beer (2003) has also connected failures of TQM with problems in its implementation, rather than due to the theoretical constructs and methodological issues. He, therefore, highlights the need for high quality management.

According to Cornesky et al. (1991), there are certain conditions, which should be established, before implementing TQM, in consecutive order. The first step is to educate and enhance commitment of administration staff and, then, to educate and establish commitment of the faculty and the academic staff. The next step requires the establishment of trust and pride in the quality of work, while change of institutional culture follows. Trivellas and Dargenidou (2009) have studied the influence of academic and administrative staff's job satisfaction on service quality, as they realized that in higher education the human factor is essential.

Mehra et al. (2001) have found in the literature, 45 factors which are linked with TQM implementation, which they put into five categories. Focus on human resources, management structure, quality tools, supplier support, and customer orientation are found to be the major factors. Within the first category, human resources focus, group-based incentive systems, training, involvement and empowerment of the staff, adoption of reward systems tied to key measures and recognition are vital for the successful implementation of TQM. Regarding management structure, leadership, and organizational culture are the most important elements. Providing adequate information to the staff and prioritizing and coordinating actions are related to quality planning. As for the quality tools, quality planning and reengineering, measurement of key result areas and informed

decisions are involved. With respect to the supplier support, it is stressed that supplier involvement and the relationship between the supplier and the buyers are critical issues. Finally, customer orientation includes considering customer satisfaction, benchmarking, and the adoption of a continuous improvement process.

Powell (1995) has found that behavioral, practices such as executive commitment, staff empowerment, and open organization are the more crucial factors which induce effective integration of TQM philosophy than TQM tools and techniques. He, therefore, emphasizes on the need to create an organizational culture that promotes these factors, instead of mere implementation of TQM principles and practices, and explain that a long process of introducing and developing changes in management practices and culture is required (Beer 2003).

The same view is expressed by Prajogo and Fujimoto (2006), who consider culture to be the most important factor that affects the implementation of TQM and identify failure to receive the desired outcomes due to inability or limited ability of human resource management. Customer focus, continuous improvement, and involvement are also essential.

Prajogo and Sohal (2006) have made the connection of quality management and innovation clear in their study. They found that TQM implementation and integration of technology management and Research and Development (R&D) management can predict organizational quality and innovation performance. They state that organizational structure and culture, strategy, and process are to be considered with regard to integrating technology and R&D and TQM in order to attain high innovation performance.

TQM in Greek Higher Education

TQM has been studied and implemented in various service contexts, among which education (Talib et al. 2011). Trivellas et al. (2012) refer to Bonvillan and Dennis (1995) to identify three factors which influence higher education quality. The market forces due to modern socioeconomic changes which require competitive practices, the political context which determines public funding and accreditation and students' expectations. It is students' satisfaction of their learning experience and outcomes that contributes to the reputation of the institution.

Customers in education are distinguished between internal, who are involved in the learning processes, and external, who are the future employers and employees. Although it is not feasible to meet all stakeholders' needs and expectations at the same time, attempts to focus on either internal or external customers are more likely to fail (Trivellas et al. 2012; Dimitrios et al. 2013a, b).

Based on the literature, Trivellas et al. (2012) have identified five types of quality which are not appropriately taken into account within educational contexts. Transcendent quality refers to the educators' expertise and reputation, without, however, taking external factors into account. Manufacturing-based quality focuses on the conformance to customer expectations, counterbalancing the past view of

focusing on resources. However, institutions do not consider customer satisfaction and external factors in the service design. Product-based quality is determined by the outcome, which is students' learning. Because it is linked with assessment practices and measurable outcomes, misleading results may occur, as specific metrics fail to assess students' knowledge and skills acquired during their studies. Value-based quality involves the customers' perceived connection between the tuition fees and their salary after graduation, which, within contemporary contexts, cannot be bridged. Finally, user-based quality is strongly related with customers' needs and preferences, which, however, are subjective and idiosyncratic in educational environments.

Although Trivellas et al. (2012) recognize the diversity in quality perceptions, they highlight a major finding in the literature, that stakeholders should be the ones who determine quality. Stakeholders in higher education are the current students and the ones who graduated and their families, the institutional staff, whether academic or administration staff, employers, agencies of the government, the local community and society.

In Greece, quality assurance is materialized by the Hellenic Quality Assurance Agency for Higher Education (HQA 2009), which, since 2006, has been responsible for evaluation procedures, without, however intervening in the function or mission of higher education. Indeed, only half of the higher education institutions in Greece have accepted and implemented these procedures (Trivellas et al. 2012).

The obstacles which are found in the literature to hinder the application of TQM philosophy include lack of constancy of purpose, mobility of top management, focus on short-term results and figures and poor evaluation of performance (Cornesky et al. 1991). In a similar vein, among the various problems that should be addressed in Greek higher education, are the following: ineffective teaching which makes students devalue education, lack of connection between university studies and labor market, poor facilities, disregard of students' and staff's well-being, professor-centered attitudes, ineffective assessment procedures (Mitka and Mouroutsos 2013).

Suggestions

In a highly demanding environment, organizations, and more specifically higher education institutions, are expected to respond to constant changes by developing innovative practices and delivering quality products and services. As quality and innovation are perceived to be sources of competitive advantage (Prajogo and Sohal 2006), the implementation of Total Quality Management (TQM) is suggested in Greek higher education institutions.

First, it is suggested that TQM practices are connected with each specific context, so that both benefits and limitations are better understood. Staff commitment should be ensured and constant feedback and shared information should be the

basis for quality improvement, based on the customers' needs and expectations (Talib et al. 2011).

The creation of a quality culture is a prerequisite for the effective implementation of TQM. For the enhancement of service quality, "… *a sustained improvement in the clarity, accuracy and reliability of services delivered under a holistic perspective*" is required (Trivellas et al. 2012, p. 106). Stakeholders' needs and expectations should be met and both internal and external customers should be taken into consideration. Focus on customer and process, innovation and environment are also suggested for the successful implementation of TQM. Constructing knowledge through innovations and strategic management should be emphasized, while both internal processes and external transactions should be carefully planned to achieve global competitiveness (Mehra et al. 2001).

Technology integration and research should be promoted to attract the interest of external customers. TQM should be integrated along with technology management and Research and Development management, so that innovations are promoted and supported (Prajogo and Sohal 2006). Decentralization and diversification, transforming organizational culture, and eliminating obsolete processes are also essential for TQM integration.

Quality of teaching should be related with resources, theoretical and practical knowledge and expertise, positive attitudes, quality curricula, creativity, openness to innovations and willingness to change. Quality in administration should be linked with flexibility, the ability to adapt and proactiveness. Leadership should support and encourage people and facilitate the process of change (Trivellas and Dargenidou 2009).

Effective leadership and employee engagement in decision-making processes, trust and commitment are also needed for TQM integration (Trivellas and Dargenidou 2009). It is important to realize that individual effectiveness of leadership is connected with both leadership competencies and managerial effectiveness (Trivellas and Reklitis 2014). Moreover, higher quality performance should be encouraged by relating staff's capabilities and needs to the organizational context and job demands (Trivellas and Reklitis 2014).

Strategic planning, effective leadership, efficient resources, and systematic assessment procedures are crucial parts of this process. In brief, continuous improvement and quality assurance should be the primary objectives of Greek higher education (Dimitrios et al. 2013a, b).

References

Cornesky, R., S. McCool, L. Byrnes, and R. Weber. 1991. *Implementing Total Quality Management in Higher Education*. Madison: Magna Publications.

Beer, M. 2003. Why Total quality management programs do not persist: the role of management quality and implications for leading a TQM transformation. *Decision Sciences* 34 (4): 623–642.

Hellenic Quality Assurance and Accreditation Agency. HQA. http://www.hqa.gr/en/index.php.

Mehra, S., J.M. Hoffman, and D. Sirias. 2001. TQM as a management strategy for the next millennia. *International Journal of Operations and Production Management* 21 (5/6): 855–876.

Mitka E., and Mouroutsos S.G. (2013). TQM principles in Greek Universities. In *Proceedings of INTED Conference*, 2166–2172, Valencia, Spain.

Nasiopoulos K. Dimitrios, Damianos P. Sakas, and D.S. Vlachos (2013a). The role of open source leadership in developing high technology companies. *Key Engineering Materials, Scientific Net* 543: 402–405 (2013).

Nasiopoulos K. Dimitrios, Damianos P. Sakas, and D.S. Vlachos. (2013b). Analysis of strategic leadership models in information technology. *Procedia—Social and Behavioral Sciences* 268–275.

Powell, T.C. 1995. Total quality management as competitive advantage: a review and empirical study. *Strategic Management Journal* 16 (1): 15–37.

Prajogo, D.I., and A.S. Sohal. 2006. The integration of TQM and technology/R&D management in determining quality and innovation performance. *Omega* 34 (3): 296–312.

Prajogo D., and Fujimoto Y. (2006, January). The role of human resource management in moderating the relationship between organisational culture and TQM adoption. In *Proceedings of the 20th ANZAM (Australian New Zealand Academy of Management) Conference on 'Management: Pragmatism, Philosophy, Priorities*, 6–9.

Talib, F., Z. Rahman, M.N. Qureshi, and J. Siddiqui. 2011. Total quality management and service quality: An exploratory study of quality management practices and barriers in service industry. *International Journal of Services and Operations Management* 10 (1): 94–118.

Trivellas, P., and D. Dargenidou. 2009. Organisational culture, job satisfaction and higher education service quality. *The TQM Journal* 21 (4): 382–399.

Trivellas, P., and Reklitis, P. (2014). Leadership competencies profiles and managerial effectiveness in Greece. *Procedia Economics and Finance* 9: 380–390 (Ebeec 2013).

Trivellas P., Ipsilantis P., Papadopoulos I., and Kantas D. (2012). Challenges for quality management in higher education-investigating institutional leadership, culture and performance. *Quality Assurance and Management* 103–129.