

SIM 2013

The Impact of Human Resources and Total Quality Management on the Enterprise

Monica Izvercian^a, Alina Radu^{a*}, Larisa Ivascu^a, Ben-Oni Ardelean^b

^a*Politehnica University of Timisoara, 14 Remus Street, Timisoara, 300191 Romania*

^b*Institutul Teologic Baptist, 29 Berzei Street, București, 010251 Romania*

Abstract

Today's highly competitive environment forces enterprises to pay attention to quality and human resources needs in order to be sustainable. This paper presents the view of the authors with respect to the relationship that exists between total quality management, human resources management, competitiveness and ISO 9000 and the impact of this relationship on the sustainability of the enterprise. The proposed conceptual models will help the persons of interest to have a better understanding of the relationship between the practices and step by step implementation to improve business performance.

© 2014 The Authors. Published by Elsevier Ltd. Open access under [CC BY-NC-ND license](https://creativecommons.org/licenses/by-nc-nd/4.0/).

Selection and peer-review under responsibility of SIM 2013 / 12th International Symposium in Management.

Keywords: total quality management; human resource; sustainability; continuous improvement; competitiveness; conceptual model.

1. Introduction

This paper focuses on demonstrating that Total Quality Management (TQM) has a special relationship with human resource management when it comes to systems for continuous improvement. Human resource management is practiced as part of quality planning at the enterprise level and thus directed to the needs of the internal consumer. Furthermore, the purpose of performance management in TQM and human resource management is to improve performance; therefore, the challenge is not only to improve the quality of the system, but also to improve people's performance.

TQM is recognized as one of the major innovations of the last decades in the field of management. There are a variety of definitions of TQM, but in this paper we will refer to this concept as "the efforts to meet and preferably

* Corresponding author.

E-mail address: alina.d.radu@gmail.com

exceed the needs and expectations of customers with the lowest cost through continuous improvement of labor, to which all those involved have a commitment, focusing on the processes of the organization" (Isaksson, 2006).

2. The relation between total quality management, human resources and competitiveness

"TQM is both a philosophy and a management program" (Palo & Padhi, 2005). In implementing TQM processes in an enterprise, the Human Resources Department plays a major role: that of developing and communicating the TQM vision, of preparing the organizational details for the implementation of TQM procedures, the actual implementation and providing necessary support to maintain the enthusiasm about TQM. The Human Resources Department can act as a pivot agent in the change process with comparative analyzes of the needs of the enterprise. It may also develop and deliver training programs that reflect the long-term mission and vision of the company.

Human resource management can act as a tool with a major role in the implementation of TQM in two ways:

- By modeling the TQM philosophy and principles at operational level in the department, the Human Resources Department can serve as a launching point for the TQM process across the enterprise.
- The Human Resources Department, with help from the management team of the enterprise, can transfer this process from the department level to enterprise level by creating an organizational culture necessary for the development and acceptance of TQM.

The Human Resources Department also has a major role in the recruitment, selection, appraisal and development of reward systems to institutionalize a quality-based orientation. An assessment of the capacity of the Human Resources Department to institutionalize TQM starts with an understanding of the TQM philosophy. In other words, TQM relies on the involvement of the management team and that of the workforce.

Over the past decades, TQM and Human Resource Management were important aspects of the business environment, being a subject of much research in the field due to the major impact that they may have on individual and organizational performance (Ooi, Teh, & Chong, 2009). Intensifying the efforts to increase the competitiveness of the enterprise is a necessity nowadays and must be achieved through an approach in terms of TQM and human resources (Hataani & Mahrani, 2013). TQM is an approach whose goal is to maximize competitiveness through continuous improvement of product quality, human resources, services, processes and environment (Jumenez & Martinez-Costa, 2009). TQM can be explained as a relationship between systems and the implementation of quality, closely related to competitiveness and performance (Azizan, 2010). The role of both human resource management and TQM is to create a culture / high performance-based system (Ooi, Teh, & Chong, 2009).

Performance management is considered to be an important step towards developing human resources and improving its performance (Khouri & Analoui, 2004). A performance evaluation system, well established (Cabrera & Cabrera, 2005), works to support human resource activities to maximize competitiveness. The activities of the enterprise performed for the professional development of their employees aim to align the human resource quality to the business needs. Using training and professional development programs should result in increased employee efficiency, and therefore the latter will have competencies, abilities and enhanced skills and as well the ability to share them (Cabrera & Cabrera, 2005). Leadership at enterprise level can be defined as the ability of an individual (the leader) to convince a team / group of employees to follow instructions in order to achieve the targets set at enterprise level (Robbins, 2003).

The above analysis emphasizes that Human Resource Management and TQM have significant effects on the competitiveness of human resources. Since there is a limited number of a rigorous research on this issue, the authors propose a research framework to analyze the effects of total quality, human resources and competitiveness. Figure 1 shows the relationship between human resource management, total quality management and competitiveness. In this theoretical model the human resources and TQM practices are independent variables and the human resource competitiveness is the dependent variable. The model attempts to provide a basis for

further analysis of the influence of human resource and practices regarding the quality on the competitiveness. The model suggests that the greater the degree of presence of good human resources practices and total quality are present within the enterprise, the larger is the human resource competitiveness and hence the competitiveness of the enterprise.

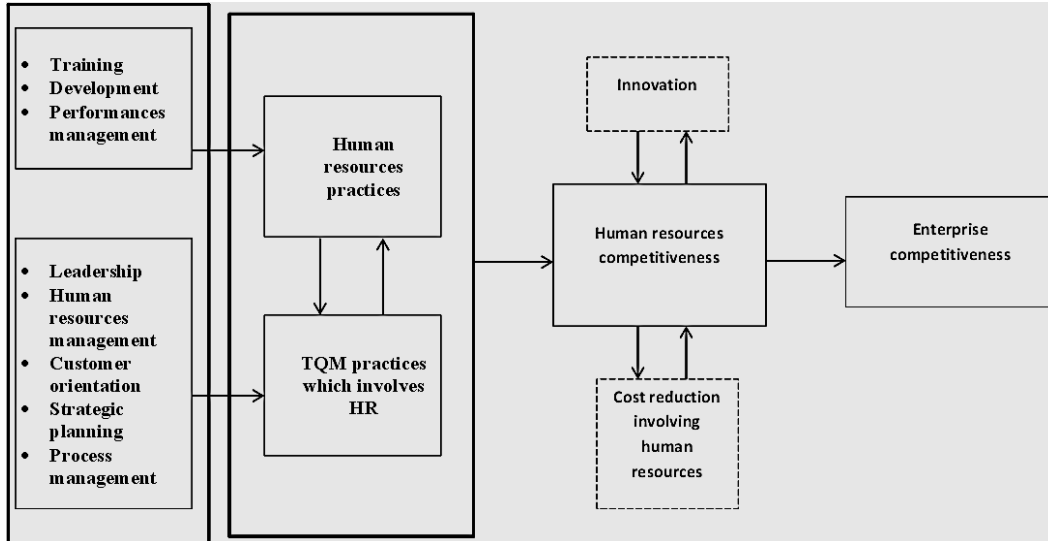


Fig. 1 Relationship human resources - total quality management – Competitiveness

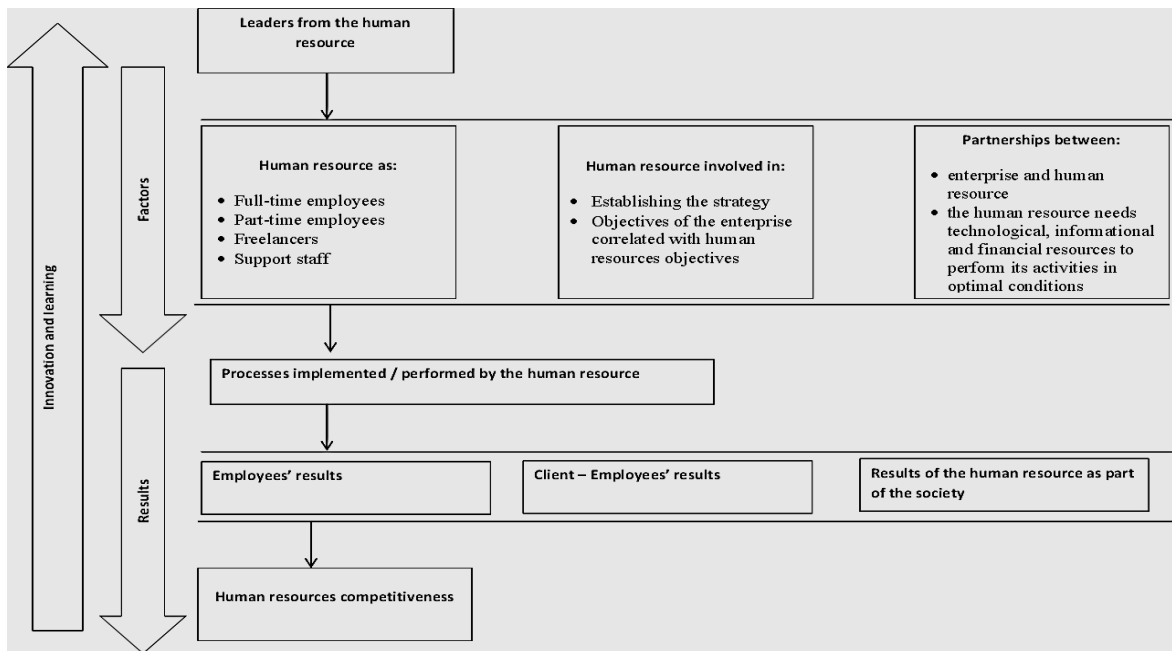


Fig. 2. The human resource involved in TQM

TQM literature explained by the following chain: the supplier is a partner - the employee is a good (product) - the client is a guide. Drawing a parallel between human resource management and TQM we find that total quality principles can easily be applied to improve the quality of human resources and thus to maximize its competitiveness. In terms of human resource TQM involves a close relationship between human resources factors and human resource specific results (see Figure 2).

3. TQM, ISO 9000 and sustainable development

3.1. Sustainable development

The sustainable enterprise will be characterized by its ability to achieve a proper balance between the long-term production capacities (product with the generic sense here) and own resources or the ones from the environment. This company will be involved in supporting local and regional sustainable development and will have to integrate itself in the horizontal and vertical development of an economic environment (Izvercianu & Ivascu, System Information for Risk Evaluation in Sustainable Enterprise, 2012).

The European Commission launched on April 2000 the tool of “triple basis line” on the request of measuring their value, having the following points as subordinated issues:

- The environment: the impact of the campaign activities on the environment, broadly – natural resources usage, rejecting the entire nature, territory occupation.
- The economic field: in collecting financial performances, the sustainable development means taking into consideration the long term perspectives of the companies, their impact on the economic growth in their field of activity and obeying the ethical principles in business.
- The social field: the social consequences of the company as a whole its representatives: employees, solicitors, clients, local community (European Commission)

This vision was completed later in 2010 with the technologic responsibility, a necessity in the current economy where technology interacts with all departments (Izvercianu, Risc si sustenbilitate, 2010).

3.2 ISO 9000

The literature shows a clear link between ISO 9000 and TQM (Martinez-Costa, Choi, Martinez, & Martinez-Lorente, 2009). The ISO 9000 family of standards was created by the Technical Committee ISO / TC 176, Quality management and quality assurance, Subcommittee SC 1, concepts and terminology.

ISO 9000 family of standards has been developed to help organizations, regardless of type, size and product provided to design, implement and conduct effective quality management systems. This standard can be used by internal and external parties, including certification bodies, to assess the capability of an organization to meet customer requirements, laws and regulations and those of the organization.

On 14 November 2008, ISO published ISO 9001:2008, the latest edition of international quality standards. This International Standard describes fundamentals of quality management systems, which are subject to ISO 9000 family, and defines related terms and elements. After 2004 ISO 9004 was created and it becomes a guide to "Management for the sustainable success of year organization. A quality management approach ". This intervention in the structure and the benefits of ISO 9000 was necessary because businesses require continuous improvement and systematization of results, elements that contribute to the sustainable development of the enterprise (Todorut, 2012).

The international standard is applicable to the following:

- organizations seeking advantage through the implementation of a quality management system;
- product users;

- organizations that want to provide their suppliers with the confidence that their requirements will be met for the products;
- those concerned with a mutual understanding of the terminology used in quality management (e.g. suppliers, customers, regulators);
- internal or external organizations that assess the quality management system or audit in accordance with the requirements of ISO 9001 (e.g. auditors, regulators, certification / registration bodies);
- internal or external organizations that provide advice and training on appropriate quality management system;
- developers of related standards.

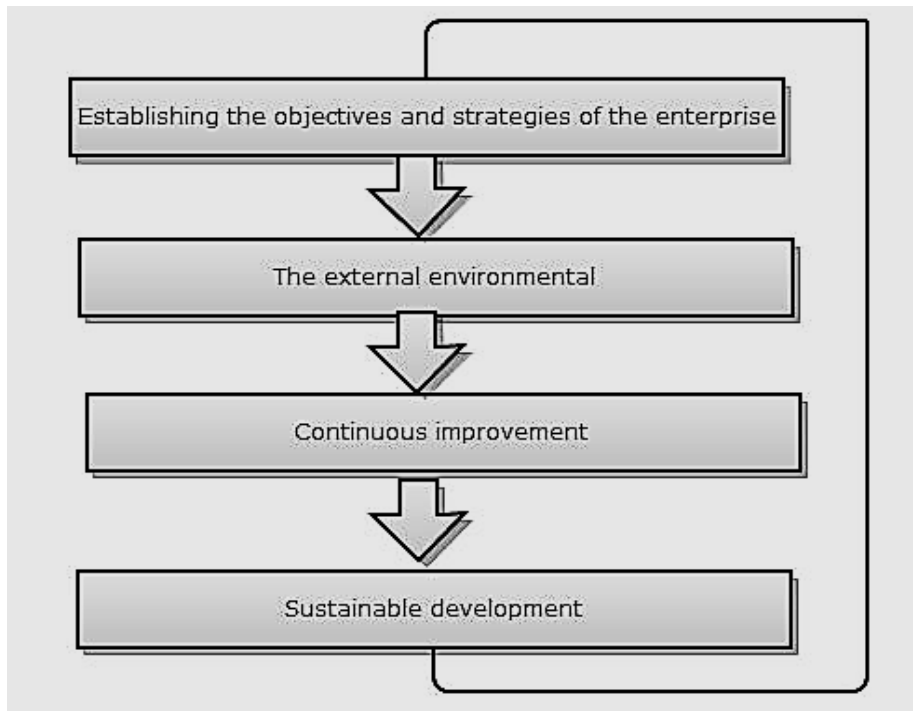


Fig. 3. The process of obtaining sustainable development

Following these presented elements, we can conclude that continuous improvement of the quality of the enterprise contributes to the sustainable development of the enterprise, a process that can be summarized as shown in figure 3. The authors present the model in which setting the goals and the strategies depending on the economic environment helps / forces a continuous improvement of the enterprise that ultimately contributes to the sustainable development of the enterprise.

4. Developing the conceptual model by integrating: the human resource, ISO 9000, TQM and sustainable development.

In developing this approach the authors considered that the human resource, as a key element within the enterprise, contributes to the continuous improvement which has to be sustained for the competitive enterprise. The continuous improvement, by adopting "total quality", offers the possibility of implementing a complex

system of management which contributes to the sustainable development of the enterprise and thus its competitiveness. The complex system offers:

- strategies, objective adopted to the external competitive environment;
- continuous monitoring of the sustainable development of the enterprise;
- development of a continuous improvement;
- continuous innovation;
- sustainable development of the society;
- activities to support the quality of human resource.

This vision is integrated in figure 4.

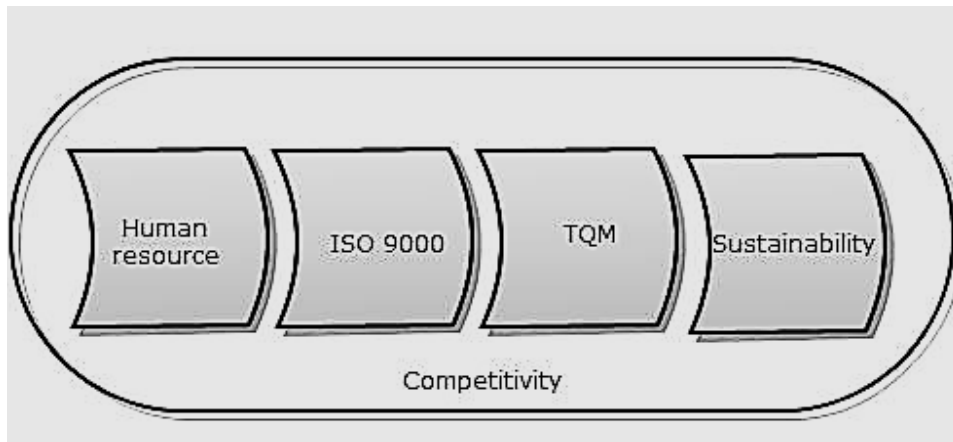


Fig. 4 Conceptual model integrating human resources, ISO 9000, TQM and sustainability

5. Conclusions

Throughout this paper the authors developed a series of theoretical models which can be applied to enterprises of all sizes, in any business or country. These models would enable the enterprises achieve sustainable development and maximize their competitiveness in both local and international markets.

The major outcomes of this research are: comprehensive literature review, TQM implementation in terms of human resources management has a positive impact on the sustainability and competitiveness of the enterprise and the presented models offer a holistic view on the positive impact of TQM, human resources management and ISO on the sustainability and competitiveness of the enterprise.

Acknowledgements

This work was partially supported by the strategic grant POSDRU 107/1.5/S/77265, within POSDRU Romania 2007-2013 co-financed by the European Social Fund – Investing in People.

References

- Todorut, A. (2012). Sustainable development of organizations through total quality management. *Procedia - Social and Behavioral Sciences*, 927 – 931.
- Azizan, A. (2010). Measuring TQM implementation: a case study of Malaysian SMEs. *Measuring Business Excellence*, 14(3), 3-15.

- Cabrera, E., & Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *The International Journal of Human Resource Management*, 16(5), 720-35.
- European Commission. (n.d.). Retrieved may 2013, from European Commission: http://ec.europa.eu/index_ro.htm
- Hataani, L., & Mahrani, S. (2013, 01). Strategic human resource management practices: mediator of total quality management and competitiveness (a study on small and medium enterprises in kendari southeast sulawesi). *International Journal of Business and Management Invention*, 2(1), 8 - 20.
- Isaksson, R. (2006). Total quality management for sustainable development: Process based system models. *Business Process Management Journal*, 12(5), 632 - 645.
- Izvercianu, M. (2010). *Risc si sustenbilitate*. Timisoara.
- Izvercianu, M., & Ivascu, L. (2012). System Information for Risk Evaluation in Sustainable Enterprise. *International Conference on Energy and Environmental Science*. Cambodia: International Conference on Energy and Environmental Science.
- Jumenez, D., & Martinez-Costa, M. (2009). The performance effect of HRM and TQM: a study in Spanish Organization . *International Journal of Operations & Production Management*, 29(12), 266-289.
- Khoury, G., & Analoui , F. (2004). Innovative management model for performance appraisal: the case of the Palestinian public universities. *Management Research News*, 27(1-2), 56 -73.
- Martinez-Costa, M., Choi, T., Martnez, J., & Martinez-Lorente, A. (2009). ISO 9000/1994, ISO 9001/2000 and TQM: The performance debate revisited. *Journal of Operations Management*, 495–511.
- Ooi, K.-B., Teh, P.-L., & Chong, A. Y.-L. (2009). Developing an integrated model of TQM and HRM on KM activities. *Management Research News*, 32(5), 477 - 490.
- Palo, S., & Padhi, N. (2005). How HR professionals drive TQM: a case study in an Indian organization. *The TQM Magazine*, 17(5), 467 - 485.
- Robbins, S. (2003). *Organizational Behaviour: Concepts, Controversies, Applications* (11th ed.). New Jersey: Prentice Hall.