

Improving organizations performance through Supply Chain Quality Management practices

Ana Cristina Fernandes

Production and Systems Department
University of Minho
Braga, Portugal
acfernandes@dps.uminho.pt

Maria do Sameiro Carvalho

Production and Systems Department
University of Minho
Braga, Portugal
sameiro@dps.uminho.pt

Paulo Sampaio

Production and Systems Department
University of Minho
Braga, Portugal
paulosampaio@dps.uminho.pt

Abstract

This research aims to develop a conceptual framework to explain and to explore the relationships among the different dimensions of supply chain quality management (SCQM) and their impact on organizational performance, based on the four perspectives of the balanced scorecard. The ultimate objective of the approach proposed aims at supporting companies to implement and/or improve SCQM practices to promote organizational excellence. This research identified some key practices of SCQM that might impact on organizational performance, including management and strategic planning, stakeholders' involvement and commitment, information, leadership and continuous improvement and innovation. From the supply chain management perspective, specific important dimensions are: procurement, internal logistics and distribution. Concerning quality management one pointed out product/service quality and culture of quality areas.

SCQM is a system-based approach for performance improvement which integrates supply chain partners and takes advantages of upstream and downstream links in order to create value and to improve customer satisfaction (Foster, 2008). Therefore, there is a need to change the current organizational thinking that is focused in a company, and expand it to an inter-organizational behaviour which involves customers, suppliers and other stakeholders. This strategic change will develop a more competitive organization. The conceptual model proposal is an attempt to embrace the most important issues concerning SCQM. Additionally, the conclusions of this work will raise new management practices that will be important for the worldwide companies.

Keywords

Supply chain quality management, organizational performance, conceptual model, integration

Acknowledgements

The first author wish to acknowledge a research grant from Fundação para a Ciência e Tecnologia (FCT), Portugal (SFRH/BPD/87242/2012) and Fundo Social Europeu (FSE) (Programa Operacional Potencial Humano (POPH), Quadro de Referência Estratégico Nacional (QREN)). This work was supported by national funds through FCT with reference UID/CEC/00319/2013.

Biography

Ana Cristina Fernandes is graduated in Materials Engineering (2004, 5-year degree) and received a PhD in Materials Engineering from the University of Minho, in 2011, entitled “Development of TiCxOy thin films”. Cristina is (2013-...) Postdoctoral Researcher in supply chain management and quality in the Systems and Production Department at Minho University in Portugal; (2012) worked in a Multinacional company in quality, logistic, production and Health and safety at work; (2012) post-graduate in Lean Management. Her research interests include Quality Management and Supply chain Management.

Maria do Sameiro Carvalho is graduated in Computer and Systems Engineering at the University of Minho (1986, 5-year degree), holds an MSc degree in Transportation Planning and Engineering and received a PhD in Transportation Planning from the University of Leeds, UK (1996). Maria do Sameiro is (2004-...) Associate Professor in the Systems and Production Department at the University of Minho in Portugal; member of the ALGORITMI research center and integrates the Systems Engineering, Optimization and Operational Research Group. Maria do Sameiro is responsible for teaching courses in the areas of logistics and Supply Chain Management in various undergraduate and master's degree courses from the University of Minho, having supervised a large number of MSc dissertations and doctoral theses. She reviewed more than twenty papers for scientific journals and conference proceedings. Her research interests include Operational Research, Logistics and Supply Chain Management. The teaching and research interests fall in the areas of techniques and applications of Operations Research, transportation, logistics and supply chain management. It is in these areas that have been responsible or co-responsible for several R&D projects and has co-authored or authored several papers published in international conferences and journals.

Paulo Sampaio is graduated in Industrial Engineering (2002, 5-year degree) and received a PhD in Systems and Production Engineering from the University of Minho, in 2008, entitled “ISO 9000 worldwide phenomenon research: origins, motivations, consequences and perspectives”. Paulo is (2009-...) Researcher and Assistant Professor in the Systems and Production Department at the University of Minho in Portugal; (2008-...) Invited Professor in several Quality Management post graduate courses; (2008-...) Quality Management Consultant; (2009-...) Consultant and Partner in a spin-off of statistical consultancy – GESTA;; (2010-...) Member of the Sectoral Commission for Teaching of the Portuguese Institute for Quality; (2010-...) American Society for Quality (ASQ) Country Counselor for Portugal; (2011-...) Member of the Technical Committee 80 on Quality Management and Quality Assurance of the Portuguese Institute for Quality; (2011-...) Vice-President of the University of Minho Alumni Association; (2011-...) Member of the ASQ Membership Committee; (2012-...) Member of the ASQ Influential Voices group; (2012-...) President of the Portuguese Quality Researchers Network. Paulo had been (2000 - 2005) Teaching Assistant in the Systems and Production Department at the University of Minho, Portugal; (2002-2004) Product and Project Manager in the Portuguese Association for Certification (APCER); (2004-2008) PhD Student at the University of Minho, Portugal; (2005-2010) Founder Member and President of the University of Minho Industrial Engineering Alumni Association; (2009-2011) Assistant Professor at the Lusíada University, Portugal; (2010-2012) Vice-President of the Portuguese Association for Quality North Region Delegation; (2010-2012) President of the General Assembly of the University of Minho Industrial Engineering Alumni Association. His research interests include Quality Management and Quality Engineering in general.