

Expanding the Concept of Quality Management to Global Supply Chains

Peter Neergaard, Professor (pn.om@cbs.dk)

Esben Rahbek Pedersen, PhD student (erp.om@cbs.dk)

Department of Operations Management
Copenhagen Business School
Solbjerg Plads 3
2000 Frederiksberg C
Denmark

Abstract

In the light of globalisation and the international division of labour, the article will stress the importance of a new conception of quality management, focusing more on the social and environmental aspects of quality in global supply chains with a particular emphasis on suppliers' perspectives. The increasing focus on corporate social responsibility, business ethics, corporate citizenship, sustainable development etc. indicates that managers have failed to see social and environmental aspects of the production as an integrated part of quality.

Key Words: Corporate Social Responsibility (CSR), Supply Chain Management (SCM), Quality Management (QM), Suppliers, Globalisation.

1. Introduction: Expanding the borders of quality management

Efficiency is often understood as doing things right, whereas effectiveness implies doing the right thing. Quality is basically a combination of efficiency and effectiveness: to do the right things right. However, the understanding of the concept 'right' differs significantly over time and reflects dominant worldviews and conceptions of organisations. In the beginning, companies were predominantly concerned with the internal aspects of the production (Ross, 1997). Optimising products, processes and services internally was more or less what 'right' implied. The efficiency-side of quality was dominant, and effectiveness was mainly a question of serving the owners' interest by serving the customers. This is pretty much what most people still think quality is all about. New principles, tools, techniques and systems within the field of quality management are often employed within the boundaries of a particular organisation.

“Whereas total quality management (TQM) techniques could dramatically improve productive processes in individual companies, quality initiatives needed to be expanded to embrace upstream and downstream channel partners if their full potential were to be realized”.

Just like classical quality management, SCM begins with the customer (Schary & Skjøtt-Larsen, 2001). The overall objective of quality management in supply chains is also the same: - to do the right things right, or more formally, to improve all processes, products, services, and work cultures continuously in order to generate cost leadership and/or competitive differentiation (Ross, 1997). However, SCM looks at the whole value chain from end users to suppliers of raw materials (see figure below).

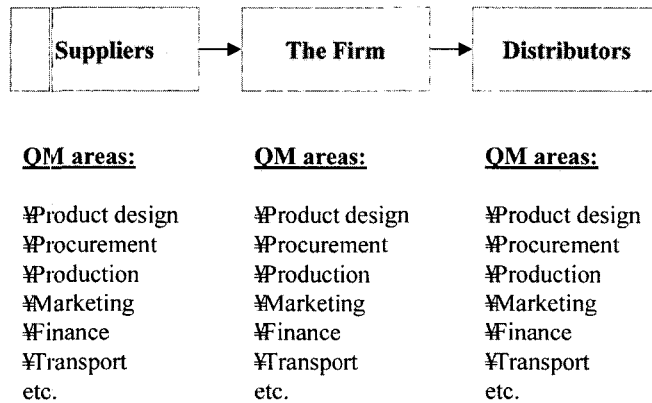


Figure 2. SCM perspective on quality management

Expanding the quality focus from the focal company to the whole chain is not without implications. One of the crucial issues is the lack of control with activities beyond the company's direct control. In the classical view of the company, control begins and ends with the corporate boundaries. Actually, control is one of the main reasons why companies organise in the first place (Douma & Schreuder, 2002). In supply chain management, control is extended to include the whole chain. However, it is difficult to exercise control, because the company has no direct control of the whole chain (Schary & Skjøtt-Larsen 2001). This is especially the case in global supply chains, where the companies are separated not only legally, but also economically, culturally and geographically.

To deal with the limited ability to control the activities outside the boundaries of the company, a lot of resources have been allocated to ensure the quality in global supply chains. From a theoretical point of view, a number of attempts have been outlined to guide companies in global supply chains. For instance, transaction cost theory tries to describe which activities ought to be the subject of outsourcing/internalisation, while e.g. the Principal-Agent (P-A) theory and network theory discuss possible safeguards that can prevent companies from ex ante and ex post opportunism (see e.g. Koch 1995, 1997; Petersen, 1993; Child, 1998; Johanson & Mattson, 1987). However, this field still has to be developed to ensure quality in global supply chains.

As a consequence of the increasing focus on the SCM perspective, suppliers need to attach more importance to the quality management of their own supplies. Quality management begins to spread throughout the supply chain. It is no longer sufficient for suppliers to satisfy their customers' need for quality, they must also pass on the requirements to their own suppliers. Moreover, the SCM approach implies that managing the activities in the supply chain becomes a crucial element in developing and sustaining a competitive advantage. Suppliers will be evaluated on their ability to add value to the products and services, e.g. by participating in new product designs and improvements in processes, packaging or transportation. The traditional measures of regulating the relationship between customer and supplier may still be used, which means contracts, formalised quality management and certification, but new measures will be added. Communication and collaboration will take a more prominent role in controlling the relationship. In a survey, the suppliers expressed strong enthusiasm and support for these types of efforts. They indicated that working collaboratively with customers may lead to better policies, which make sense for business and may yield greater benefits (BRS, 2001).

3. The new 'Corporate' Value Chain perspective

Even though the supply chain perspective has made a great contribution to QM, it is becoming increasingly clear that even SCM fails to include all relevant aspects of quality. QM is still predominantly concerned with the characteristics of the product (or product chain), whereas the social and environmental impacts of business activities generally are ignored. However, practitioners and scholars are becoming increasingly aware that doing the right things right is not just a matter of optimising the process from suppliers to final users. The ethics of business activities are becoming a more important part of the public agenda, and companies are increasingly evaluated on their ability to meet - not only the customers' needs - but also the

various needs of employees, NGOs, the local community and other interest groups. Even though many companies still leave the question of corporate social responsibility (CSR) to the philosophers, an increasing number of companies are beginning to realise that they can no longer ignore the moral obligations placed on them by society.

In the wake of globalisation, transnational companies (TNCs) have been faced with a number of social and environmental concerns. For instance, companies from industrialised countries have been accused of moving production facilities to developing countries to avoid costly restrictions from environmental regulations and society (the so-called 'industrial flight' hypothesis) (Hansen, 1995; Schary & Skjøtt-Larsen, 2001). Moreover, numerous companies have been criticised for violating union rights, use of child labour, dangerous working conditions, discrimination, etc. (Kolk, 2000).

Realising the limitations of national regulation in developing countries and the universality of basic human rights and core labour standards, international organizations such as the World Bank, OECD, ILO and the UN have launched a number of CSR initiatives. Lately, the EU has also adopted the language of CSR and promoted a program to stimulate CSR improvements. The first step was a Green Paper in 2001 launching a debate about the concept CSR in an effort to build a partnership for the development of a European framework to promote CSR (EC 2001, 2002).

Moreover, there has been a rise in private initiatives promoting CSR, of which the Global Reporting Initiative (GRI), Social Accountability (SA) 8000, Occupational Health and Safety (OHSAS) 18000 and the AA1000 framework are the most notable. Finally, a number of voluntary codes for global supply chains have emerged in response to the concern over the working and external environments in supply factories especially in developing countries. The World Bank estimates that approx.1,000 codes exist today.

The development reflects the overall tendency to see the company as integrated in rather than isolated from society. Companies of today do not only have to be profitable, they also have to be good corporate citizens. The implication is that the concept of quality, i.e. doing the right things right, has moved beyond the borders of mainstream SCM literature. The price and the functional characteristics of a product are no longer the only quality criteria. The social and environmental aspects of a product are becoming more and more integrated in the evaluation of quality, which means that social, environmental and economic performance has to be integrated in future quality management. Quality should not only be related to the product itself, but also to the environmental and social impact of the processes in the whole chain (Andriof & McIntosh, 2001; Neergaard, 2002). Quality, understood as doing the right things right, is approaching the concept of corporate social responsibility (CSR).

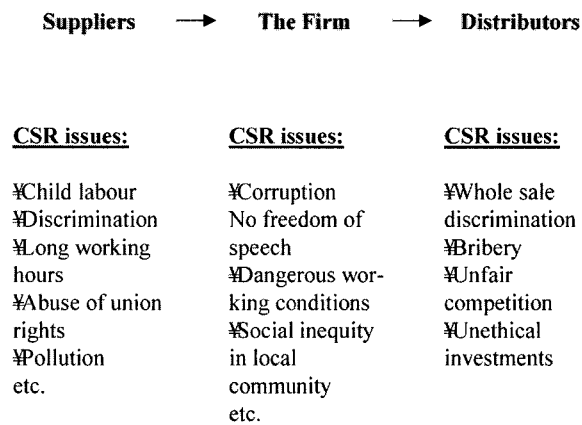


Figure 3. Examples of CSR issues in supply chains Source: Inspired by WBCSD (2003)

In consequence, quality management has to be redefined to cope with the increasing focus on the social and environmental aspects of the production in global supply chains. In order to do so, companies have to move from a shareholder perspective to a stakeholder perspective. The latter is one of the central components in a CSR approach. Even though CSR has attracted scholars from almost every social science discipline, most contributions seem to build on a stakeholder theory, in which the firm has to capture the interests of groups and individuals that can affect and are affected by the firm (see Boal & Peery, 1985; Freeman & Reed, 1998). In other words, a CSR perspective on quality differs from both QM and SCM as it includes more groups and individuals as important stakeholders. Quality is not only what the customers perceive it to be. Quality also depends on the other stakeholders' view of it. In the figure below, we have tried to illustrate the consequences of a stakeholder approach to quality management.

As mentioned earlier, SCM advocates that competition is no longer a matter of firms against firms, but supply chains against supply chains. In our view, we are approaching a corporate value chain competition in global networks. To be more precise, companies have to evaluate the technical, economic, social and environmental impact of their activities to remain competitive in the global economy. By the concept 'corporate value chain', we want to draw attention to all the activities in the supply chain, which increase the company's worth to the relevant stakeholders. The company's worth does not only comprise the day-to-day prices that customers are willing to pay for the company's products, but also the legitimacy it receives from stakeholders in general.

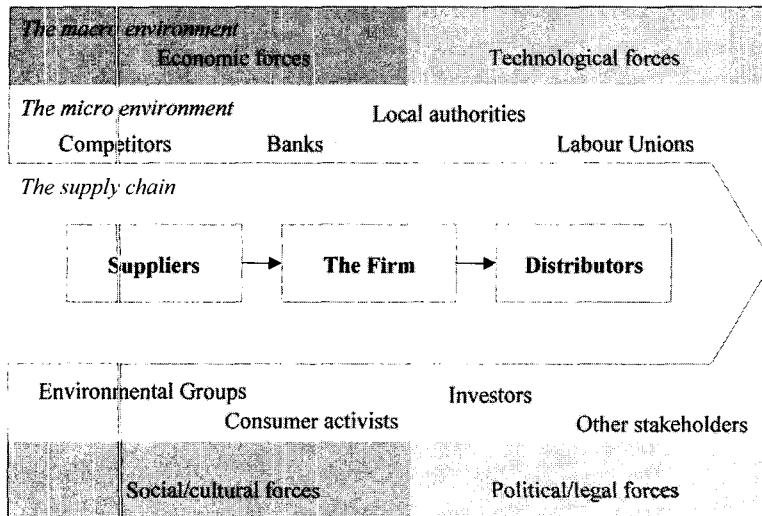


Figure 4. A CSR perspective on QM/SCM Source: Inspired by Palmer & Hartley (2002) and Carrol & Buchholtz (1999)

However, there are several challenges to CSR implementation in global supply chains. At the broadest level, the main challenge is the old controversy whether social/environmental and economic goals are compatible or conflicting. Some scholars (e.g. Porter & Linde, 1995; Bonifant et al., 1995) acclaim the potentials for CSR, while others have a more sceptical attitude to whether companies are able to respond to environmental and social concerns (e.g. Hussain, 1999; Walley & Whitehead, 1994). The former involves e.g. cost savings, new market opportunities, protection from regulatory authorities and differentiation opportunities. In terms of the latter, the barriers include e.g. limited investment resources, high costs of implementing CSR, lack of information and know-how, difficulties in quantifying the benefits of CSR and organisational inertia (Utting, 2000; Diller, 1999).

On the more operational level, there are still major co-ordination and control problems associated with CSR in global networks. Expanding the concept of quality increases the control problems related to co-operation in global supply chains. This applies to potential suppliers as well. To get access to the market, the principles of CSR have to be applied to their own operations as well as to those of their suppliers. At present, the variety of codes, standards and labelling schemes might generate inefficiencies and confusion among suppliers in the global networks. It is no longer sufficient to certify according to ISO 9000 and/or ISO 14000. CSR initiatives vary from lofty principles to rigid standards imposing unnecessary burdens on the suppliers. This is especially the case, if buyers use a top-down strategy to implement the initiatives. The likely consequences of such an approach will be a low supplier commitment,

tensions among the companies in the supply chain and an increased likelihood of opportunistic actions. There seems to be a need for communication and collaboration, which include participation, consultancy, training and technical assistance in the companies involved in the chain. Information and knowledge transfer become crucial elements in the future development of buyer - supplier relationships (Neergaard, 2002).

4. Conclusion - Redefinition of Quality Management

There is an old saying: When you only got a hammer, all problems look like a nail. It is becoming increasingly clear that the hammer of traditional QM is unable to nail the challenges facing companies in global supply chains. Companies can no longer put their trust in a narrow interpretation of quality, focusing primarily on the products, processes and services within the boundaries of the firm. High product quality and outstanding economic performance will not necessarily be the outcome of such a strategy. Realising that quality is not only a matter of doing the right things right - from the customer's or shareholder's perspective, the concept of 'quality' has to be expanded in scope and content. Quality should be linked to both the product itself and the environmental and social impact of the production in the whole chain. In addition, companies must integrate the interest of more stakeholders in their quality management efforts. Quality, in terms of doing the right things right, is approaching the concept of CSR.

5. Discussion - Institutionalisation of standards

The concept of CSR has received a great deal of attention over the past decades. Even though international organisations, governments, industry organisations, academics and businesspeople have embraced the concept of CSR enthusiastically, only few companies have actually adopted CSR, and there is still no consensus about what corporate social responsibility implies (Carroll & Buchholtz, 1999; Wood, 1991; Utting, 2000). As such, it might be assumed that the whole CSR movement can be reduced to business rhetoric without any real content. However, we advocate a slightly more positive view. Even though we are far from experiencing a worldwide acceptance and adoption of CSR, the numerous attempts to articulate CSR and develop frameworks, tools and systems to plan, implement and maintain CSR in companies might stimulate an institutionalisation of the concept in the long run. By an institutionalisation of CSR, we understand the process out of which a legitimate social order will evolve in relation to the

working and external environments.

We have already seen that quality became institutionalised through a number of standards and management principles (e.g. Just-In-Time (JIT), Total Quality Management (TQM), Business Process Reengineering (BPR), ISO 9000 etc.). Today, we are witnessing the same tendency in environmental and social management. Especially in environmental management, where a large number of standards, reporting systems and labelling schemes have been launched during the 1990s (e.g. ISO 14000, EMAS, the EU's 'Flower' label, the Nordic Swan label). In terms of CSR, we argue that we are just seeing the bare beginnings of the institutionalisation of social issues in management thinking. The fact that there are still so many different codes, standards, labelling schemes and reporting systems suggests that we are still in the early stages of an institutionalisation of CSR. For obvious reasons, this is rather costly, inefficient and confusing to everyone - especially to suppliers that have to deal with the variety of claims from different buyers. Therefore, it is reasonable to believe that over the next decades, we will see a standardisation of CSR where some initiatives will disappear while others will prevail.

Literature

1. Andriof, J. & McIntosh, M. (2001), "Perspectives on Corporate Citizenship", Greenleaf Publishing Ltd, Sheffield, UK.
 2. Boal, K. & Peery, N. (1985), "The Cognitive Structure of Corporate Social Responsibility", *Journal of Management*, Vol. 11, No. 3, pp. 71-82.
 3. Bonifant, B.C. et al. (1995), "Gaining Competitive Advantage through Environmental Investments", *Business Horizons*, July-August 1995, Vol. 38, Issue 4, pp. 37-48.
 4. BSR (2001) "Suppliers' Perspectives on Greening the Supply Chain", Business for Social Responsibility Education Fund, San Francisco.
 5. Carroll, A.B & Buchholtz, A.K. (1999), "Business & Society - Ethics and Stakeholder Management", South-Western College Publishing, 4th ed., Cincinnati, Ohio.
 6. Child, J. (1998), "Trust and International Strategic Alliances: The Case of Sino-Foreign Joint Ventures", pp. 241-272 in Lane, C. & Bachmann, R. (1998), *Trust within and between Organizations*, Oxford University Press, New York.
 7. Christopher, M. (1999), "Global Supply-Chain: The Role of Agility", *Logistics and Transport Focus*, Vol. 1, No. 1, June 1999.
 8. Croom, S., Romano, P. & Giannakis, M. (2000), "Supply chain management: an analytical framework for critical literature review", *European Journal of Purchasing and Supply*
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Management, Vol. 6, pp. 67-83.

9. Diller, J. (1999), "A social conscience in the global marketplace? Labour dimensions of codes of conduct, social labelling and investor initiatives", *International Labour Review*, Vol. 138 (1999), No. 2, pp. 99-129.
 10. Douma, S. & Schreuder, H. (2002), "Economic approaches to organizations", Pearson Higher Education, 3rd ed., London.
 11. EC (2001), "Green Paper - Promoting a European framework for corporate social responsibility", The European Commission (EC), Brussels.
 12. EC (2002), "Communication from the Commission concerning Corporate Social Responsibility: A business contribution to sustainable development", The European Commission (EC), Brussels.
 13. Freeman, E. & Reed, D. (1998), "Stockholders and Stakeholders: A new Perspective on Corporate Governance", pp. 829-837 in De Wit, B. & Meyer, R. (1998), "Strategy, Process, Content, Context". The article has been adapted with permission from *California Management Review*, Vol. 25, No. 3, Spring 1993.
 14. Hansen, M.W. (1995), "Theories of Transnational Corporations, Environment and Development: A review of four dominant perspectives", Institute for Intercultural Communication and Management, Copenhagen Business School, Denmark.
 15. Hirst, P. (1997), "Globalisering, demokrati og det civile samfund", Hans Reitzels Forlag, Copenhagen, Denmark.
 16. Hussain, S.S. (1999), "The Ethics of 'Going Green': The Corporate Social Responsibility Debate", *Business Strategy and the Environment*, Vol. 8, pp. 203-210.
 17. Johanson, J. & Mattson, L. (1987), "Interorganizational Relations in Industrial Systems: A Network Approach", *International Studies of Management and Organization*, Vol. 17, No.1, pp. 303-348.
 18. Koch, C.A. (1995), "Economic Transactions, Opportunistic Behavior and Protective Mechanisms", Odense Universitet, Department of Management, No. 6/1995, Denmark.
 19. Koch, C.A. (1997), "Reduktion af risiko ved forretningsmæssige transaktioner", pp. 95-115 in Hedaa, L. & Foss, N. (1997), *Afsætning og Samarbejde*, Handelshøjskolens Forlag, Copenhagen, Denmark.
 20. Neergaard, P (1997), "Kvalitetsstyring?", *Jurist og Økonomforbundets Forslag*, Denmark
 21. Neergaard, P. (2002), "Managing Quality in a Global Supply Chain", *Euro Asia Journal of Management (EAJM)*, July 2002.
 22. Oakland, J.S. (1993), "Total Quality Management", Butterworth-Heinemann, 2nd ed., Oxford.
 23. Palmer, A. & Hartley, B. (2002), "The Business Environment", The McGraw-Hill Companies,
-

4th. ed., London.

24. Petersen, T. (1993), "The Economics of Organization: The Principal-Agent Relationship", *Acta Sociologica*, Vol. 36, No. 3, pp. 277-293.
 25. Porter, M.E. & van der Linde, C. (1995), "Green and competitive: Ending the stalemate", *Harvard Business Review*, Vol. 73, Issue 5, pp. 120-134.
 26. Ross, D.F. (1997), "Competing Through Supply Chain Management: Creating Market-winning strategies through Supply Chain Partnerships", Chapman & Hall, New York.
 27. Schary, P.B. & Skjøtt-Larsen, T. (2001), "Managing the Global Supply Chain", Copenhagen Business School Press, 2nd ed., Copenhagen.
 28. Sousa, R. & Voss, C.A. (2002), "Quality management re-visited: a reflective review and agenda for future research", *Journal of Operations Management*, Vol. 20, pp. 91-109.
 29. Utting, P. (2000), "Business Responsibility for Sustainable Development", UNRISD, Occasional Paper No. 2, Geneva, January 2000.
 30. Walley, N. & Whitehead, B. (1994), "It's not easy being green", *Harvard Business Review*, Vol. 72, Issue 3, pp. 46-52.
 31. WBCSD (2003), "Corporate Social Responsibility - The WBCSD's journey", World Business Council for Sustainable Development (WBCSD), www.wbcd.org.
 32. Wood, D.J. (1991), "Social Issues in Management: Theory and Research in Corporate Social Performance", *Journal of Management*, Vol. 17, No. 2, pp. 383-406.
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