

SYNERGY BETWEEN TOTAL QUALITY MANAGEMENT FOR SUSTAINABLE DEVELOPMENT- A GENERAL REVIEW

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Abstract

There is a desperate economic concern related to the limitations of natural resources that has been expressed by senior scientists and noted economists. Sustainable development is interpreted as a global concern that affects individual humans, organizations and the nations as a whole. The present context of sustainable development is that good performance on economic front is required to allow focus on social and environmental issues.

Keywords: *Total Quality Management, Sustainable Development*

Introduction A common definition given by World Commission on Environment and Development for sustainable development is “The development which meets the needs of present generation without compromising the ability of future generations to meet their own needs” (WCED, 1987). At the level of organization sustainability can best be described by using the Triple Bottom Line (TBL) which helps in dividing the performance on economic, social and environment dimensions (Elkington,1999; Topfer 2000). Sustainable Total Quality Management (STQM) has nowadays become a universal management topic with its requirement at each level of organization which ultimately helps in achieving the efficiency in the processes. It is in the favor of mankind to find the synergies in sustainable development and total quality management. TQM can be seen as a system of management based on methodologies, values and tool (Hellsten and Klefsjo,2000; Bergman and Klefsjo,2003).

SYNERGY BETWEEN SUSTAINABLE DEVELOPMENT AND TQM

Sustainable development is a bigger concept which engulfs TQM. The main focus of TQM is increase

in economic sustainability which is the major synergy between the two. This economic sustainability helps in reducing the exploitation of the resources and therefore helps in reducing poverty which is the greatest evil of mankind. Profit is the necessity of economic sustainability. This profit needs to be clubbed with work to minimize internal losses which is the major contributor of unsustainable performance. One way to access this loss is by calculating the cost of poor quality (Isaksson,2005). The simple math is that high cost of poor quality leads to less sustainability. **Cost of poor quality =1/economic sustainability.**

(1) TOTAL QUALITY MANAGEMENT

The core value of TQM is customer focus and continuous improvement with participation of everybody which helps in integrated development of mankind (Dale, 1999; Dahlgaard et al:). TQM values employees and partners, social responsibility. It focus on results and helps in creating values(EFQM,2003). Some of the methodologies used in TQM are six sigma and 5S the focus of which is improvement of quality and elimination of waste which ultimately helps in improving the sustainability. The tools which are used in TQM such as control charts, process charts, fishbone diagram, cause and effect diagram helps in determining the ease with which sustainability in product, process and organization can be achieved. The American Malcolm Baldrige National Quality Award (AMBNQA) and the European Foundation for Quality Management (EFQM) awards are constituted based on the core values of TQM. The causes for poor quality can be determined using cause and effect diagram which helps in improving quality and sustainability. The revised version of cause and effect diagram called 7M is used to find major quality problem and helps in eliminating

steps leading to sustainability of process (Bergman and Klefsjo, 2003).

SUSTAINABLE DEVELOPMENT

It is defined as the process of integration of economic, social and environmental factors which helps in meeting the ability and aspirations of generations to come. Sustainable development values focus on stakeholders and sustainability. One of the best method to judge sustainability is by using Triple Bottom Line approach of Global Reporting Initiative. The drivers for sustainable development could be political, legal, moral and commercial (Zairi and Peters, 2002). Generally a necessity for improving economic performance is seen as a driver of sustainability. The increased focus on quality has led to the focus on sustainable development in the early 1980s. In sustainability the use of resources whether it be man, machine and material, each is used judiciously eliminating every waste that comes in the processes. In TBL focus on processes in the main criteria which helps in managing and improving the performance. The lack of indicators of quality and process focus in TBL indicates an area of synergy between sustainable development and TQM.

A TQM-SD SYSTEM

The specific combination of values, tools and methodologies between TQM and SD can be called as a management system which helps in synergizing TQM and SD. The corporate social responsibility of organization is a step towards integration of total quality management because it helps in developing the regions and areas affected by exploitation of resources which helps in reducing the harm caused to nature in the other way. Here we are compensating for the loss already made by human activities. So sustainable development and total quality management collaboration is the utmost need of the hour to avoid the depletion of resources so that our future generations can have a stake in the development process of society. The components of TQM-SD system can be stakeholder focus, sustainability and accountability. Therefore the main focus of synergy between SD and TQM is the find the areas of collaboration between the two so that quality in the process is improved and productivity of the system is increased without the extra consumption of additional resources. The PDCA cycle also helps in improving the processes and helps in eliminating waste. It therefore helps in the process of continuous improvement. This process of continuous improvement is thus can be a prime focus area of synergy between SD and TQM.

Conclusion

Accountability and transparency are the twin pillars of sustainability. They both help in improving quality in every phase of development. In the SD and TQM the focus on customer focus has been shifted to stakeholder focus. The focus of organization is on customer but due care is given to stakeholder. The process models can be used to improve sustainability. The process charts, flow diagrams etc. can contribute to increasing the quality of the processes and can lead to increasing in sustainability. It can therefore be conclude that sustainability are inter related where TQM is one aspect of sustainability and therefore can be termed as a subset of sustainability. If the proper synthesis of TQM and SD is achieved then it will lead to the economy in the processes and the profit of all the stakeholders will be expanded and the satisfaction of the customers will be appreciated.

Results

It can be said that TQM has a very close coordination and cooperation with SD. If the quality is compromised then it will automatically leads to unsustainability. Thus total quality is proportional to sustainability.

References

1. Bergman, B. and Klefsjo, B. (2003), Quality from Customer Needs to Customer Satisfaction, 2nd ed., Studentlitteratur, Lund.
2. Dale, B.G. (1999), Managing Quality, 3rd ed., Blackwell Publishers Ltd, Oxford
3. Dahlgaard, J., Kristensen, K. and Gopal, K. (1998), Fundamentals of Total Quality Management, Chapman & Hall, London
4. EFQM (2003), The EFQM Excellence Model, European Foundation for Quality Management, Brussels.
5. Edgeman, R.L. and Hensler, D.A. (2001), "The AV chronicle: earth@omega or sustainability@alpha?", The TQM Magazine, Vol. 13 No. 2, pp. 83-90.

10. Elkington, J. (1999), *Cannibals with Forks: The Triple Bottom Line Of 21st Century Business*,
11. Capstone, Oxford, New edition
12. Hediger, W. (1999), "Reconciling 'weak' and 'strong' sustainability", *International Journal of*
13. *Social Economics*, Vol. 26 Nos 7/8/9, pp. 1120-43
14. Hellsten, U. and Klefsjö, B. (2000), "TQM as a management system consisting of values,
15. techniques and tools", *The TQM Magazine*, Vol. 12 No. 4, pp. 238-44
16. Isaksson, R. (2005), "Economic sustainability and the cost of poor quality", *Corporate Social*
17. *Responsibility & Environmental Management*, Vol. 12, pp. 197-209
18. Topfer, K. (2000), "The triple bottom line economic, social natural capital", *UN Chronicle*, Vol. 36
19. No. 2, pp. 39-40
20. WCED (1987), *Our Common Future: The Brundtland Report*, Oxford University Press, Oxford.
21. Zairi, M. & Peters, J. (2002). The impact of social responsibility on business performance. *Managerial Auditing Journal*, 17(4), 174-178