Middle-East Journal of Scientific Research 23 (12): 2941-2945, 2015

ISSN 1990-9233

© IDOSI Publications, 2015

DOI: 10.5829/idosi.mejsr.2015.23.12.22877

# Significance of Top Management Commitment on the Implementation of ISO 14000 EMS towards Sustainability

Sreenivasan Jayashree, Chinnasamy Agamudainambi Malarvizhi, Shabnam Mayel and Amin Rasti

Faculty of Management, Multimedia University, Malaysia

**Abstract:** ISO 14000 EMS certification is yet considered as an expense among Malaysian manufacturing organizations rather than a beneficial cost that should be considered as an investment which ultimately leads to valuable outcomes. Since the adoption and implementation of ISO 14000 EMS is mostly voluntary, the understanding of its significant is usually neglected. ISO 14000 EMS is grounded on the concept that greater environmental performance and sustainability can be gained while environmental matters are identified and managed thoroughly. Although voluntary environmental management standards are attracting increasing interest, the overall number of corporations seeking ISO 14000 EMS is relatively low among Malaysian manufacturing organizations. Top management has an essential role in ensuring the proper implementation of an EMS. Hence, this paper emphasizes on the impact of top management commitment on the ISO 14000 EMS implementation and investigates the effect of the implementation on sustainability of corporations.

**Key words:** Top Management commitment • ISO 14000 EMS • Implementation • Corporate Sustainability • Manufacturing Industry • Malaysia

## INTRODUCTION

An increasing number of industries are dedicating significant priority to environmental issues due to the pressure from market and environmental procedures and regulations. Hence, "Clean production and green products" have developed into imperative matters to manufacturers. Enormous increase in the industrial development and activities in this decades has resulted in environmental degradation leading to global warming, ozone layer depletion, air pollution and toxic waste. It has been widely stated that manufacturing organizations are the main cause for these environmental issues and problems.

The EMS is a major component of the management system and it includes environmental responsibility, various organizational procedures and processes, which in turn helps industries to match with environmental regulations and helps to identify the economic and technical benefits and it makes sure that the environmental policies are effectively followed by them. "International Organization for Standardization (ISO) 14000 is a series of standards" established by the ISO to cover different facets of environmental management.

Several scholars emphasized on the role of top management commitment in "supporting new management initiatives" [1].

These studies highlighted that tom management commitment is essential in improvement of "environmental management processes" [2]-[4]. Moreover, it is also suggested that commitment of top management enhances the overall path of "sustainability management" in the organization as a whole [5]-[7]. Motivations such as legitimacy, market success and internal improvement encourages corporations towards corporate sustainability strategies [5]. According to organizational [2] factors should be thoroughly explored to enrich the ISO14000 EMS implementation literature. Even though study in the field of sustainability is raising dramatically, total of existing sustainability studies is scarce in this area. Hence, this study focused on the importance of top management commitment towards the ISO 14000 EMS implementation leading to sustainability. Thus the objectives of this study are namely; 1. To explore the effect of top management commitment on ISO 14000 EMS implementation and 2. To examine the relationship between ISO 14000 EMS implementation and sustainability.

#### Literature Review

**Top Management Commitment:** Setting an environmental vision or policy requires top management involvement to create a general strategy to lead the organization's effort to attain the vision [8]. "Top management support has been found to be an important factor for the successful integration of a standard". The high level of participation of the top management in environmental management system acts as a good measure to show the organizational commitment to the environment.

Top management must inject a strong culture that facilitates maximum freedom and leads employee to make environmental improvements without any intervention. ISO 14000 requires a widespread participation from all levels within the organization and this is possible only if the top management is more committed. Top management support and performance are significantly connected with the effectiveness of environmental management processes.

Top management support is considered essential in improving the effectiveness of environmental management processes and it is one of the critical success factors. Managers are the major determinants of EMS adoption and they play an essential role in supervising and guarantying that EMS is implemented effectively. [9]-[12].

These scholars highlighted the fact that lack of top management engagement and commitment would fail the whole quality and environmental efforts [13]. Top management commitment plays an essential part in the ISO 14000 implementation since "it is as process-oriented as ISO 9000 (Clause 4.2 – environmental policy, ISO 14001 [14])". Commitment and support from management is necessary factor of adoption and implementation of innovations in a company, particularly "environmental systems and top management support can affect new system initiatives success by promoting employee empowerment, by facilitating employee involvement by promoting a cultural shift and increased commitment by the organization's staff" [15].

In a study by [16] among newly industrialized Malaysian organizations, he revealed that most organizations pursue ISO 14000 EMS due to the persistency of top management and not because their own willingness or experience. ISO 14000 EMS is voluntary in nature and it is not a regulated system. Environmental goals and policy must be determined by the organization's top management and top management is also responsible for reviewing the EMS periodically to

confirm its sustained conformity and efficiency. Lack of commitment from top management will lessen the credibility of the program for the employees [17].

ISO 14000 EMS: Environmental management in one of the important challenges for this century for the organizations and also the individuals. Successful implementation of management standards requires employee empowerment and they must be willing to make better suggestions. Organizations around the globe eventually seek certification to assist organization in establishing an efficient system and method to present environmental matters into every aspect of the company's operations and offer an organized approach to tackle environmental issues."The inter-relationship between firms and the environment in which their core business is enacted is becoming increasingly complex" [18]. Partly, this is because of the increasing consciousness of the damaging and possibly disastrous, environmental effect "business organizations can have on the planet - and its resources". This increasing consciousness has been also paralleled by stakeholder's expectations as to what a firm's attitude will be in relation to its environmental impact.

Guidelines, overall environmental policy as well as principles are provided by the ISO 14000 series of environmental management standards to assist a company improve and implement an EMS [19]. An underpinning aspect of an EMS, ISO 14000 for instance, is widely accepted as top management commitment, displayed "by means of the firm's written environmental policy" [20]. "Top management's commitment and leadership skills are among the key factors to successful implementation" [21], [22]. It is imperative to consider that the alliance of the "three processes of people, strategy and operations" is essential in the execution of a strategy. Therefore, managers are required to "master the individual processes and the way they work synergistically".

Corporate Sustainability: The contribution of organizations is essential in achieving sustainable development [23]. "Corporations are perceived to be responsible for many negative environmental and societal impacts" [24], [25]. Nevertheless, corporations are also supposed as having the "resources, technology, global reach, marketing skills and sometimes, the motivation to work towards more sustainable societies" [26], [27], also assisting to alter the customer's attitude to be more

environmentally conscious and to be more consistent with sustainability values [28]. "Sustainable development is defined as a three-dimensional approach integrating economic, environmental and social aspects of economic development that aims to consider future generations and intergenerational justice" [29].

Sustainable development is about the improvement of the environment and wellbeing of the people. Sustainability can be achieved through the human resource aspects of environment management. Management of sustainability in corporations contains the internal enhancement of the organization as well as a dedication to sustainability of the economy and society in overall [30].

**Research Methodology:** A survey questionnaire is employed in this study to deal with the research questions appropriately and hypothesis testing is applied to test the model and to investigate the relationship between Top management commitment, ISO 14000 EMS implementation and corporate sustainability in Malaysian Manufacturing firms.

In this study, Unit of analysis is the organization. Yet, Managers were contacted by email as targeted respondents to collect the data. Manufacturing organizations in Malaysia are the population meant for this research and samples were selected from "the Federation of Malaysian Manufacturer (FMM, 2013)" and SME Corp. This study applied probability sampling and simple random sampling to collect 220 data from the sampling frame. Spss will be applied to analyze the data received from the targeted respondents.

**Proposed Framework:** This study aims to explore the relationship between top management commitment and effective implementation of ISO 14000 EMS and also to investigate the possible relationship between ISO 14000 EMS implementation and corporate sustainability

Hence, based on the literature review, figure 1. Presents the proposed framework of this study.

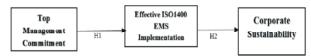


Fig. 1: Conceptual framwork

**Development of Hypothesis:** This study proposed 2 hypothesis as follows,

**H1:** The relationship between top management commitment and the implementation of ISO 14000 EMS is positive and significant.

**H2:** The relationship between ISO 14000 EMS implementation and sustainability is positive and significant.

## **CONCLUSION**

This paper is corresponding to the "Malaysian Government Economic Transformation Program" by empowering Malaysian organizations in considering standards as a culture within their organizations rather than a cost to endorse the objective of becoming "a highincome nation by 2020". Moreover, this studywill highly benefit managers of the Malaysian manufacturing organizations by contributing to the literature of ISO 14000 EMS as well as sustainability since the number of sustainability studies in this area is scarce in spite of the dramatic increase of attention towards sustainability in overall. This study also stablishes that commitment of top management in the implementation of an EMS increases the effectiveness of the implementation. Further studies are suggested to explore other factors that might have influence on the effective implementation towards corporate sustainability and are also encouraged to explore the direct relationship between such factors and corporate sustainability.

### REFERENCES

- Phan, T.N., K. Baird and B. Blair, 2014. The adoption and success of activity based management practices across organizational life cycle stages. Int. J. Prod. Res., 52(3): 787e803.
- Tung, A., K. Baird and H.P. Schoch, 2011. Factors influencing the effectiveness of per-formance measurement systems. Int. J. Oper. Prod. Manag., 31(12): 1287e1310.
- 3. Menguc, B., S. Auh and L. Ozanne, 2010. The interactive effect of internal and external factors on a proactive environmental strategy and its influence on a firm's performance. J. Bus. Ethics, 94: 279e298.
- 4. Savely, S.M., A.I. Carson and G.L. Delclos, 2007. An environmental management system implementation model for U.S colleges and universities. J. Clean. Prod., 15: 660e670.

- Zutshi, A. and A.S. Sohal, 2004. Adoption and maintenance of environmental man-agement systems: critical success factors. Manage. Environ. Qual. Int. J., 15(4): 399e419.
- Epstein, M.J., 2008. Making Sustainability Work. Best Practices in Managing and Measuring Corporate Social, Environmental and Economic Impacts. Greenleaf: Sheffield, UK.
- Stead, J.G. and W.E. Stead, 2008. Sustainable strategicmanagement. An evolutionary perspective. International Journal of Sustainable Strategic Management, 1(1): 62-81. DOI: 10.1504/08.18127.
- Lauring, J. and C. Thomsen, 2009. Collective ideals and practices in sustainable development: Managing corporate identity. Corporate Social Responsibility and Environmental Management, 16(1): 38-47. DOI: 10.1002/csr.181.
- Anusingh, Lather and Goyal Shikha, 2015.
  "Impact of green human resource factors on environmental performance in manufacturing companies?:" Society for Science and Nature, 6(1): 23-30.
- Terziovski, M., D. Samson and D. Dow, 1997.
  "The business value of quality management systems certification. Evidence from Australia and New Zealand", Journal of Operations Management, 15(1): 1-18.
- 11. Boiral, O., 2007. "Corporate greening through ISO 14001: a rational myth?", Organization Science, 18(1): 127-146.
- Jang, W.Y. and C.I. Lin, 2008. "An integrated framework for ISO 9000 motivation, depth of ISO implementation and firm performance", Journal of Manufacturing Technology Management, 19(2): 194-216.
- Heras-Saizarbitoria, I., 2011. "Internalization of ISO 9000: an exploratory study", Industrial Management and Data Systems, 111(8): 1214-1237.
- Padma, P., L.S.G. and C.R., 2008. A study on the ISO 14000 certification and organizational performance of Indian manufacturing firm.
- 15. ISO 14001, 1996. International Organization for Standardization, ISO, Geneva.
- Zhu, Q., J. Sarkis, J.J. Cordeiro and K.H. Lai, 2008. Firm-level correlates of emergent green supply chain management practices in Chinese context. Omega., 36: 577-591.

- 17. Tan, L.P., 2005b. Implementing ISO 14001: Is it beneficial for firms in newly industrialized Malaysia? Journal of Cleaner Production, 13(4): 397-404.
- Poksinska, B., J. Jörn Dahlgaard and J.A.E. Eklund, 2003. Implementing ISO 14000 in Sweden: motives, benefits and comparisons with ISO 9000. International Journal of Quality and Reliability Management, 20(5): 585-606.
- 19. Porter, T.B., 2006. Coevolution as a research framework for organizations and the natural environment. Organization and Environment, 19(4): 479-504.
- Cassells, Sue, Kate Lewis and Alec Findlater,
  "SMEs and ISO 14001 Adoption: A New Zealand Perspective." Small Enterprise Research,
  18(1): 19-32.
- 21. Daily, B.F. and S. Huang, 2001. Achieving sustainability through attention to human resource factors in environmental management. International Journal of Operations and Production Management, 21(12): 1539.
- Zutshi, A. and A.S. Sohal, 2005.
  "Integrated management systems: the experiences of three Australian organisations", Journal of Manufacturing Technology Management, 16(2): 211-32.
- Douglas, A. and D. Glen, 2000. "Integrated management systems in small and medium enterprises", Total Quality Management, 11: 686-90.
- 24. Blindheim, B.T. and O. Langhelle, 2010. Areinterpretation of the principles of CSR. Apragmatic approach. Corporate Social Responsibility and Environmental Management 17(2): 107-117. DOI: 10.1002/csr.235.
- Hart, S., 2000. Beyond greening. Strategies for sustainable world. Harvard Business Review on Business and the Environment. Harvard Business School Press: Boston, MA, USA., pp: 105-129.
- Dunphy, D., A. Griffiths and S. Benn, 2003. Organizational Change for Corporate Sustainability. Routledge: London, UK.
- 27. DeSimone, L.D. and F. Popoff, 2000. Eco-Efficiency. The Business Link to Sustainable Development. MIT Press: Cambridge, MA, USA. Diesendorf.
- 28. Henriques, A. and J. Richardson (eds.)., 2005. The Triple Bottom Line. Does it All Add Up? Earthscan: London, UK.

- Schaltegger, S. and R. Burritt, 2005.
  Corporate sustainability. In The International Yearbook of Environmental and Resource Economics, H. Folmer and T. Tietenberg (eds).
   Edward Elgar: Cheltenham., pp. 185-232.
- Küpers, W.M., 2011. Integral responsibilities for a responsive and sustainable practice in organization and management. Corporate Social Responsibility and Environmental Management, 18(3): 137-150. DOI: 10.1002/csr.272.