Chapter 5.2

Collaboration as a Key Enabler for Small and Medium Enterprises (SME) Implementing Green ICT

Ioakim (Makis) Marmaridis
IMTG, Australia

Bhuvan Unhelkar
University of Western Sydney & MethodScience, Australia

ABSTRACT

Global competitiveness through advances in ICT is giving SMEs abilities that up until a few years ago were inconceivable. Along with increased market reach and added impact SMEs also begin to feel the pressure of becoming more ecologically friendly. Therefore, they need to establish Green ICT practices within their businesses. While these practices are relatively better resourced in large businesses, SMEs find it rather challenging to implement Green ICT practice because of their size and amount of resources they can put behind such initiative. This chapter describes how collaboration can be used as a key enabler for SMEs adopting Green ICT for their operations. Green ICT improvements are presented in the context of people, process and technology framework and individual solutions are offered along with their benefits that SMEs can readily adopt and begin their transition towards Green ICT.

INTRODUCTION

Green computing is a widely adopted initiative of most large organisations (Murugesan, 2008) worldwide. There are substantial benefits, no doubt, from all these efforts at a social and economic level (InfoAge 2007; HBR, 2009). There is however an entire class of businesses known as SMEs (Small and Medium Enterprises) who would benefit greatly from adopting Green ICT practices and at the same time are constraint in several ways from moving to this level of adoption.

This chapter builds on some previously published work in the area of SME technology diffusion and technical transformation capabilities (Marmaridis & Unhelkar, 2005; Marmaridis, 2004). The chapter discusses the drawbacks SMEs face in trying to adopt Green practices along each of the three ITIL dimensions of people, process, and technology and how collaborative practices can see them overcome these constraints. Finally the chapter closes with the presentation of a set of best practice steps for SMEs wishing to undergo transformation in their ICT operations and enable them to realize the benefits of becoming Green.

WHAT DRIVES SMEs TOWARDS GREEN ICT?

There are number of factors that drive a business to adopt and embrace green ICT initiatives.

These initiators have been discussed in the past by Unhelkar and Dickens (2008). Four such specific initiators that propel an organisation to develop and implement an environmentally responsible strategy are the social and political pressure, rules and regulations, enlightened self-interest and a responsible collaborative business eco-system. These are discussed next *in the context of an SME,* as also shown in Figure 1:

- Social & political pressure: when there is pressure on an organisation from the society in which it exists, then the organisation is forced to consider environmental strategies. Social pressure can come in from the marketing department that wants to differentiate the products or services, the education system that enforces green values in the upcoming generation, or the political pressure from the electorate. However,

Figure 1. Drivers for environmental responsibility in small and medium business (based on method-science.com)

8 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/collaboration-key-enabler-small-medium/51753

Related Content

Pharmaceuticals in Environment: Global Concerns and Regulations
Alka Bali (2022). *Research Anthology on Emerging Techniques in Environmental Remediation (pp. 308-334).*
www.irma-international.org/chapter/pharmaceuticals-in-environment/291240

Web-Based Digital Habitat Ecosystems for Sustainable Built Environments
Kamatchi Pillaiand Cagil Ozansoy (2013). *Green Technologies and Business Practices: An IT Approach (pp. 185-199).*
www.irma-international.org/chapter/web-based-digital-habitat-ecosystems/68347

Sustaining the Green Information Technology Movement
Miti Garg, Sumeet Gupta, Mark Gohand Robert Desouza (2011). *Green Technologies: Concepts, Methodologies, Tools and Applications (pp. 111-123).*
www.irma-international.org/chapter/sustaining-green-information-technology-movement/51692

Eco-Innovation and IT Technologies for Sustainable Development of Health and Recreational Tourism of Serbia
Gordana Petar Djukic, Ilic S. Biljanaand Goran R. Milovanovi (2022). *Disruptive Technologies and Eco-Innovation for Sustainable Development (pp. 171-190).*
www.irma-international.org/chapter/eco-innovation-and-it-technologies-for-sustainable-development-of-health-and-recreational-tourism-of-serbia/286443

A Complex Values Map of Marginal Urban Landscapes: An Experiment in Naples (Italy)
Maria Cerretaand Giuliano Poli (2013). *International Journal of Agricultural and Environmental Information Systems (pp. 41-62).*
www.irma-international.org/article/a-complex-values-map-of-marginal-urban-landscapes/97713