

Chapter 2

A Method for Examining SME Descriptions of Environmental Sustainability Online

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ABSTRACT

This chapter contributes to green ICT/IS research by presenting a content analysis method for analysing the environmental sustainability descriptions on small and medium enterprise (SME) websites. Past research focuses on large firms, and few past studies have explored how firms of any size describe sustainability online. The chapter presents the method's four steps: 1) identifying sources of SME websites; 2) determining if websites describe sustainability; 3) archiving the website content for later analysis; and 4) coding the website content using a structured coding framework developed by combining the literature on IS and sustainability. The authors anticipate the method will be useful to researchers and practitioners. The chapter gives examples of these uses such as qualitative and quantitative research objectives and practical outcomes (e.g. SME website design guidelines for incorporating sustainability content) which could result from applying the method.

INTRODUCTION

There is growing recognition that the ICT and IS communities must conduct environmental sustainability research because ICT/IS contributes to ecological degradation and offers tools to help preserve natural resources (Chen, et al., 2008;

Elliot, 2007, 2011; Melville, 2010; Watson, et al., 2010). For the purposes of this chapter environmental sustainability is defined as voluntary values, technologies and practices which directly or indirectly reduce negative impacts on the environment in the areas of pollution and natural resource depletion (adapted from Simpson, et al., 2004).

DOI: 10.4018/978-1-4666-1972-2.ch002

Empirical studies in this field have so far focused on ICT/IS as a contributor to the problem. For example, the literature explores the negative environmental impact of ICT lifecycles in terms of pollution, waste (DesAutels & Berthon, 2009; Sacchero & Molla, 2009; Vykoukal, et al., 2009) and software energy efficiency (Capra & Merlo, 2009). Many studies examine the policies, governance, usage, sourcing and disposal practices firms can use to reduce the negative impact which ICT is having on the environment (e.g. Babin & Nicholson, 2009; Elliot, 2009; Mithas, et al., 2010; Molla, 2009a, 2009b; Molla & Cooper, 2010; Molla, et al., 2009a; Molla, et al., 2009b; Piotrowicz & Cuthbertson, 2009; Schmidt, et al., 2010).

There has been much less research focusing on ICT/IS as part of the solution to sustainability, which is known as “green IS” (Ijab, et al., 2010). Some studies have treated ICT/IS in a balanced way as both a problem and solution (e.g. Chen, et al., 2009; Elliot & Binney, 2008; Kuo & Dick, 2010), but only a few have focused on green IS (e.g. Jose & Lee, 2007; Morhardt, 2010; Parker, et al., 2010; Pollach, et al., 2009; Rodriguez Bolivar, 2009). This literature suggests that examples of green IS includes: 1) IS for monitoring, measuring and analysing the impact of products/services, business practices and supply chains on the environment; 2) environmental management IS for managing compliance with environmental regulations; optimising business practices so that they are more sustainable; 3) IS such as websites reporting on and describing an organisation’s sustainability to stakeholders; and 4) IS such as telework for replacing business practices with those involving reduced environmental impact (Chen, et al., 2008; Thambusamy & Salam, 2010).

This chapter focuses on green IS by presenting a content analysis method for examining the websites of small and medium enterprises (SMEs) to analyse their environmental sustainability descriptions. For the purposes of this chapter SMEs are defined based on employee numbers. This

varies depending on national contexts, whereby SMEs are those with fewer than 500 staff in the USA and Canada, fewer than 250 staff in the European Union, and fewer than 200 staff in Australia (Parker, et al., 2009b).

It is important to conduct research on environmental sustainability by SMEs because they comprise over 90% of firms in most worldwide economies (Parker, et al., 2009b; Spence, 2007) and so they are likely to have a significant collective negative impact on the environment due to their large numbers (Revell, et al., 2010). The limited research on SME engagement in sustainability has focused on identifying barriers/drivers and benefits (Parker, et al., 2009b). Many SME owner-managers resist sustainability because, for instance, they lack money (Evans & Sawyer, 2010; Revell & Blackburn, 2007), time and knowledge (Bradford & Fraser, 2008; Collins, et al., 2007), or because there is no perceived business case or stakeholder pressure (Collins, et al., 2007; Evans & Sawyer, 2010; Revell & Blackburn, 2007). There are SME owner-managers, however, who do engage in sustainability for altruistic reasons, stakeholder compliance reasons such as government regulations, operational reasons such as reducing costs (Parker, et al., 2009b), and/or strategic reasons such as improving reputation with customers, increased sales or competitive advantage (Revell, et al., 2010).

This chapter is only concerned about SME owner-managers who for whatever motivation describe their environmental sustainability efforts on their websites. Recent research shows that SMEs in various developed countries (e.g. Australia, Denmark, Spain, Sweden, UK) are increasingly using websites to communicate their sustainability efforts (Murillo & Lozano, 2006; Nielsen & Thomsen, 2009; Parker, et al., 2010; Zackrisson, et al., 2008). Like the IS literature (e.g. Alam, 2009; Tan, et al., 2009) these findings in the literature on sustainability emphasise the strategic role which websites can play for SME

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