

# Chapter 14

## The Rise of “Environmental Sustainability Knowledge” in Business Strategy and Entrepreneurship: An IT-Enabled Knowledge-Based View of Tourism Operators

**Jean Marie Ip-Soo-Ching**  
*La Trobe University, Australia*

**Suzanne Zyngier**  
*La Trobe University, Australia*

### ABSTRACT

*This chapter articulates a conceptual framework to analyse the management of environmental sustainability knowledge in tourism that is underpinned by both the knowledge-based view of the firm (Grant, 1996; Spender, 1996) and the KM Life Cycle (Liebowitz & Beckman, 1998; Salisbury, 2012). This deliberate management of knowledge enables NTOs to build a knowledge-base about the natural environment and to use that knowledge for environmental sustainability, business sustainability, and local community education. Ten NTOs in Australia, Malaysia, Thailand, and Vietnam were investigated to analyse their KM of environmental sustainability. In supporting the knowledge-based view and KM of environmental sustainability knowledge, a further conceptual framework is also advanced for the analysis of how Information Technology enables environmental sustainability knowledge to be created, captured, shared, and applied at NTOs among their staff, customers, and communities.*

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## INTRODUCTION

Environmental sustainability has increasingly become a major focus for research in the past two decades in the context of depleting resources, increasing energy costs, increased levels of pollution, and damages to the natural environment (EPA 2007). These problems will affect humanity in the 21<sup>st</sup> century and beyond with more severity than in previous centuries (IPCC 2007). Extreme risks such as natural disasters, economic disasters, environmental degradations and social unrests appear highly likely as a result of environmental problems (Stern 2007). Research in environmental sustainability is being conducted by science and technology at an increasingly pace to find solutions to protect and maintain the quality of the natural environment (Dupont Global Collaboratory 2011). The business and IT disciplines are also conducting research in environmental sustainability because businesses need to be environmentally focused in their growths and successes (Porter and Reinhardt 2007). Environmental sustainability has emerged as a strategic objective for governments and industries in the 21<sup>st</sup> century (IPCC 2007; Stern 2007), yet little is known about the management of environmental sustainability knowledge. This research investigates environmental sustainability knowledge using an integration approach of *Environmental Sustainability and Knowledge Management* supported by IT conducted among Nature-Based Tourism Operators because they depend on the ongoing quality of the natural environment for their existence and success. This research develops a definition, theory, and knowledge management tools to study environmental sustainability knowledge.

The chapter is organised as follows. We discuss the dependence of Nature-Based Tourism Operators on the natural environment for ongoing success and their Knowledge-Based view of Environmental Sustainability. A discussion follows of the Knowledge Management Life Cycle of Environmental Sustainability Knowledge and the

role of Information Communication Technology in Environmental Sustainability Knowledge. There follows discussion of modes of staff, customer and public learning about Environmental Sustainability Knowledge. Finally conclusions are drawn for theory and for practice.

## DEPENDENCE ON THE NATURAL ENVIRONMENT FOR ONGOING SUCCESS

Tourism is a salient discipline, industry, and sector in which to investigate environmental sustainability knowledge and its management because nature-based tourism operators (NTOs) are directly involved and dependent on the quality of the natural environment on which their operations have environmental impacts. The tourism industry is highly dependent on the quality of the natural environment in which it operates (Butler 1991; Hunter and Green 1995; Australian Government Department of Resources, Energy and Tourism 2008). The tourism industry relies on the sustainability of its natural environment because the sustainable development of tourism depends on the quality and integrity of the natural environment as key selling points (Kokkrannikal 2003; Giannoni and Maupertius 2007). The favourable natural environmental quality of destinations in terms of beaches, coral reef, mountains, and forests, forms the many attractions of tourism destinations that tourists have come to enjoy (Hall and Lew 1998). Mathison and Walls (1982) commented that the natural environment is the foundation of a tourism destination because in the absence of an attractive environment, there would be very few tourism attractions.

Therefore a strategic management of environmental sustainability knowledge can enable NTOs to implement new strategies, and processes based on higher knowledge levels consisting of experience, and lessons learned (Argyris 1999). A knowledge management approach links tourism

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