Chapter 50

Towards a Model of Sustainability Capabilities and Competitive Advantage: Empirical Evidence From India

Santanu Mandal

ICFAI Business School (IBS), India

ABSTRACT

Firms have lately realized the importance of sustainability because of (1) decreasing resources (2) difficulty in getting adequate and skilled resources. Therefore firms are trying their best to include sustainability considerations in their operational, tactical and strategic planning. In this scenario, this paper makes an attempt to operationalize several kinds of resources existing in an organization from a sustainability perspective and tries to investigate which of these can best help the organization in developing sustainability capabilities which will eventually led the firm to gain competitive advantage. Based on the data collected from 204 executives engaged in different sectors, the findings indicate that except accounting resources, all other resources like information technology, finance, marketing and operations are significant in enabling the firm to develop sustainability capabilities. Relatively, operations resources and information technology resources are the most important predictors of sustainability capabilities and hence firms can focus more on these departments while strategic resource allocation. Finally, the study exhibited that sustainability capabilities do help a firm to gain competitive advantage.

1. INTRODUCTION

Sustainability has become the new compulsory requisite, both in recent business as well as within the broader context of society. Recently, an increase in the no. of both man-made and natural disasters has urged firms to reconsider their strategies in terms of sustainability. There are a number of forces shaping this growth of sustainability which includes the supply and demand characteristics surrounding energy consumption coupled with a growing understanding of factors relating and causing climatic change and

DOI: 10.4018/978-1-5225-5481-3.ch050

greater transparency concerning both the environmental and the social actions of organizations. Supply chain managers are in a particularly advantageous position to impact – positively or negatively –environmental and social performance, through for example supplier selection and supplier development, modal and carrier selection, vehicle routing, location decisions, and packaging choices (Teuteberg & Wittstruck, 2010). To add to this, studies have been exploring the critical success factors for sustainable supply chain management (Wittstruck & Teuteberg, 2012).

Previous research has discussed risk management and sustainability issues in tandem (Juttner et al., 2003; Christopher & Peck, 2004; Vanany et al., 2009; Foerstl et al., 2010; Christopher et al., 2011)however studies have not addressed how firms can arrive at sustainability. Grant (1991) argued that competitive advantage can be built through capabilities and resources. Hall (2006) discussed several intangible resources and capabilities in terms of functional, positional, cultural and regulatory and developed a framework linking them to competitive advantage. In the sustainability and supply chain interface, Seuring et al. (2008) provided a list of studies based on case studies and conceptual models. However, there was no empirical model in exploring how the various resources of a firm can be a source of competitive advantage for the same. In this regime, Dao *et al.* (2011) based on conceptual ground developed a framework for sustainability consisting of IT resources, HRM resources and SCM resources which when combined, gives rise to sustainability capabilities for any firm. The current study adapted the model of Dao *et al.* (2011) and based on the theory of resource based view and dynamic capabilities, attempts to develop an empirical model (backed by theory) consisting of IT, accounting, finance, marketing and operations resources which when deployed suitably will give rise to sustainability capabilities for a firm and hence will help the same to gain competitive advantage.

The current study attempts to address the following research questions:

- 1. What are the significant resources that enable to a firm to develop sustainability capabilities?
- 2. What is the relation between sustainability capabilities and competitive advantage?

2. THEORY AND RESOURCE SELECTION

The underlying theory for the proposed framework of sustainability is the resource based view with dynamic capabilities theory. The Resource Based view (RBV) of firm has been extensively used to study various aspects of supply chain operations. The extent to which a firm can gain a competitive advantage largely determined by its capacity to properly deploy its resources and capabilities which are often rare, valuable, not substitutable and difficult to imitate (Barney, 1991). These resources and capabilities are often viewed as total tangible and intangible assets that may comprise a firm's management skills, processes and routines etc. (Barney et al.,2001). Since the resources and capabilities possessed by various firms are different, hence their performance (Wernerfelt, 1984). While resources are viewed as a collection of factors owned and or controlled by a firm; capabilities are viewed as a capacity to deploy these resources (Amit & Schoemaker, 1993).

Later, Teece et al. (1997) propounded the Dynamic Capabilities theory (DCT) that embarked the advancement of resource based view. According to this theory, firms must build, develop, integrate and reconfigure their internal and external competencies for adapting to dynamic environments. DCT assumes that a firm can create a position for itself in the market by creating capabilities that can help it to perform better during environmental uncertainties. As the same may not be matched by its competitors

17 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/towards-a-model-of-sustainability-capabilities-

and-competitive-advantage/202261

Related Content

A Survey of Knowledge Work Productivity Metrics

Min Xiao, David A. Nembhardand Changjun Dai (2012). *International Journal of Productivity Management and Assessment Technologies (pp. 1-18).*

www.irma-international.org/article/a-survey-of-knowledge-work-productivity-metrics/93087

Agents Oriented Genetic-K-Means (AOGK) System for Plagiarism Detection

Hadj Ahmed Bouararaand Yasmin Bouarara (2017). *International Journal of Operations Research and Information Systems (pp. 22-39).*

www.irma-international.org/article/agents-oriented-genetic-k-means-aogk-system-for-plagiarism-detection/169782

Firm Selection Based on Logistics Risk Factors: A Multiple Criteria Decision Making Approach Iskender Peker, Selcuk Korucukand Birdogan Baki (2019). *International Journal of Operations Research and Information Systems (pp. 31-43).*

www.irma-international.org/article/firm-selection-based-on-logistics-risk-factors/229428

Business Process Management and Six Sigma: Leveraging the Synergistic Relationship

Suresh Subramoniam, Venky Shankararaman, K. V. Krishnankuttyand Ravi Chinta (2012). *Business Enterprise, Process, and Technology Management: Models and Applications (pp. 74-89).*www.irma-international.org/chapter/business-process-management-six-sigma/64139

Two Novel Heuristics Based on a New Density Measure for Vehicle Routing Problem

Abdesslem Layeb (2015). International Journal of Operations Research and Information Systems (pp. 78-90).

www.irma-international.org/article/two-novel-heuristics-based-on-a-new-density-measure-for-vehicle-routing-problem/124763