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

Santanu Mandal, Department of Operations and Information Technology, ICFAI Business School (IBS), Hyderabad, Andhra Pradesh, 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.

Keywords: Competitive Advantage, Confirmatory Factor Analysis, Sustainability Capabilities, Structural Equation Modeling, Sustainability in Organizations

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 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

DOI: 10.4018/ijamse.2014010103
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 and hence can be a source of competitive advantage for the firm (Teece et al., 2007). Based on these theories, the study posits that the various resources like IT, accounting, finance, marketing and operations when deployed in a suitable manner will enable a firm to develop various capabilities that will ultimately help to firm to gain competitive advantage in the market.
Related Content

The Effective Approach of Managing Risk in New Product Development (NPD)

Developing Efficient Processes and Process Management in New Business Creation in the ICT-Sector
[www.igi-global.com/chapter/developing-efficient-processes-process-management/36584?camid=4v1a](www.igi-global.com/chapter/developing-efficient-processes-process-management/36584?camid=4v1a)

A Multi-Objective Approach for Materialized View Selection
[www.igi-global.com/article/a-multi-objective-approach-for-materialized-view-selection/225812?camid=4v1a](www.igi-global.com/article/a-multi-objective-approach-for-materialized-view-selection/225812?camid=4v1a)
Acceptance of ERP Solutions in Maturity Use Phase: Key Influence Factors for SAP and Microsoft Dynamics NAV
www.igi-global.com/article/acceptance-of-erp-solutions-in-maturity-use-phase/96861?camid=4v1a