Journal of Operations Management 38 (2015) 1–13

Contents lists available at ScienceDirect

Journal of Operations Management

journal homepage: www.elsevier.com/locate/jom

Sustainable evaluation and verification in supply chains: Aligning and leveraging accountability to stakeholders

Jury Gualandris[a], Robert D. Klassen[b], Stephan Vachon[b,*], Matteo Kalchschmidt[c]

[a] University College Dublin, Smurfit Graduate Business School, Ireland
[b] Western University, Ivey Business School, Canada
[c] Università degli studi di Bergamo, Department of Management, Information and Production Engineering, Italy

ARTICLE INFO

Article history:
Received 4 September 2013
Received in revised form 23 June 2015
Accepted 25 June 2015
Available online 4 July 2015
Accepted by Daniel R. Guide

Keywords:
Social responsibility
Monitoring
Inclusivity
Stakeholder engagement

ABSTRACT

Managers are being challenged by multiple (and diverse) stakeholders, which have variety of expectations and informational needs about their firm's supply chains. Collectively, these expectations and needs form a multi-faceted view of stakeholder accountability, namely the extent to which a firm justifies behaviors and actions across its extended supply chain to stakeholders. To date, sustainable supply chain management research has largely focused on monitoring as a self-managed set of narrowly defined evaluative activities employed by firms to provide stakeholder accountability. Nevertheless, evidence is emerging that firms have developed a wide variety of monitoring systems in order to align with stakeholders' expectations and leverage accountability to stakeholders. Drawing from the accounting literature, we synthesize a model that proposes how firms might address accountability for sustainability issues in their supply chain. At its core, the construct of sustainable evaluation and verification (SEV) captures three interrelated dimensions: inclusivity, scope, and disclosure. These dimensions characterize how supply chain processes might identify key measures, collect and process data, and finally, verify materiality, reliability and accuracy of any data and resulting information. As a result, the concept of monitoring is significantly extended, while also considering how different stakeholders can play diverse, active roles as metrics are established, audits are conducted, and information is validated. Also, several antecedents of SEV systems are explored. Finally, the means by which an SEV system can create a competitive advantage are investigated.

© 2015 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

The challenge to integrate environmental and social issues into the management of supply chains has grown significantly over the last two decades. To illustrate, Mattel initiated a massive recall of products – made by a supplier in China – after discovering they contained lead paint applied by a second-tier supplier (Story, 2007). McDonald's Europe had to address issues of soybean agriculture in Brazil because Greenpeace reported that the firm's sourcing practices contributed to the depletion of the rainforest (Stoll, 2009). More recently, Victoria's Secret was involved in a scandal regarding children picking cotton in Burkina Faso (Simpson, 2011). This new operating context is the cumulative result of diverse demands from multiple stakeholder groups including investors, consumers, supply chain partners, legislators, and non-governmental organizations (NGOs).

It is not surprising that, in order to address the changing and diverse concerns of a wide variety of stakeholders, firms have adopted a plethora of practices, which in turn continue to evolve over time. The initial focus on internal operations (Klassen and Whybark, 1999) has broadened into a stronger external orientation (Gualandris and Kalchschmidt, 2014; Pagell and Wu, 2009). As a result, many firms are now attempting to ensure that operations and performance within their plants – as well as those managed by partners operating upstream and downstream in the supply chain – are more sustainable.

Overall, this evolution highlights the importance for firms to address the diverse expectations and informational needs of multiple stakeholders exposed to supply chain externalities (Gonzalez-Benito et al., 2011; Hall and Vredenburg, 2003). Collectively, these expectations and needs form a multi-faceted view of *stakeholder accountability*, namely the extent to which a firm jus-

* Corresponding author. Fax: +1 519 661 3959.
E-mail addresses: jury.gualandris@ucd.ie (J. Gualandris), rklassen@ivey.ca (R.D. Klassen), svachon@ivey.ca (S. Vachon), matteo.kalchschmidt@unibg.it (M. Kalchschmidt).

http://dx.doi.org/10.1016/j.jom.2015.06.002
0272-6963/© 2015 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

tifies behaviors and actions across its extended supply chain to stakeholders (Parmigiani et al., 2011). To date, sustainable supply chain management (SSCM) research has largely focused on monitoring as a set of activities employed by firms to account for sustainable operations and performance in their supply chains (Awaysheh and Klassen, 2010; Vachon and Klassen, 2006). This research, however, tends to presuppose that the "right" performance goals and processes underlie any monitoring practice, with a monolithic group of stakeholders advocating for similar outcomes. Instead, evidence is emerging that firms can develop different monitoring systems, which in turn, align to greater or lesser extent with stakeholders' expectations (Global Reporting Initiative, 2013b).

Moreover, it is well accepted that competitive advantages are possible by aligning supply chain processes with specific customer segments; we propose that a similar advantage can emerge from addressing varying stakeholder concerns, but not necessarily all equally. Any monitoring practice should take into account both the multiple informational needs noted earlier, and the processes by which those needs are met. Thus, our understanding of sustainable monitoring must evolve to consider accounting principles and processes, particularly those pertaining to inclusive verification procedures (Edgley et al., 2011; O'Dwyer et al., 2011; Simnett et al., 2009). The literature is only starting to develop an understanding about how firm capabilities and supply chain structures hinder or enable monitoring practices to respond to stakeholders' expectations for material, accurate, reliable, complete and responsive information, and potentially confer a competitive advantage (Vurro et al., 2009; Manetti and Toccafondi, 2012; Perego and Kolk, 2012).

Responding to recent calls for a stronger focus on developing new models and including additional stakeholders in SSCM research (Pagell and Shevchenko, 2014), this paper seeks to make three contributions. First, by leveraging concepts from the accounting literature, we explore the degree to which firms might address stakeholders' expectations leading to a departure from narrower, conventional views of sustainable monitoring. We propose a multi-dimensional construct, termed *sustainable evaluation and verification* (SEV), that encompasses all activities that identify key sustainability metrics; collect and process data; verify the reliability and accuracy of any data and resulting information; assess the relevancy of this information to multiple stakeholders; and subsequently disclose some or all of this information. Thus, we seek to integrate and extend the principles and processes embedded in the accounting literature and in such initiatives as the Global Reporting Initiative (GRI) into earlier sustainable supply chain management research.

Second, this conceptual development establishes a foundation to examine a set of antecedents that influence the characteristics of an SEV system. Specifically, prior research sheds some light on the role of three main factors: firm capabilities, particularly in sustainability-oriented practices (Manetti and Toccafondi, 2012; Perego and Kolk, 2012; Reed et al., 2009); expectations of highly salient stakeholders (Mitchell et al., 1997; Parmigiani et al., 2011); and the degree of supply chain integration (Flynn et al., 2010; Kim et al., 2011).

Finally, insights emerge from related literature and anecdotal evidence about the means by which an SEV system is a critical determinant of competitive advantage (e.g., Eisenhardt, 1989; Egels-Zanden and Lindholm, 2014; Reed, 2008 Reed, 2008). A monitoring system that involves some stakeholder groups and looks deeply into the supply chain can offer relevant insights into potential risks and inefficiencies. However, it is conceivable that this system can develop too far, leading to potential misalignments with some stakeholders' expectations that work against a firm's credibility and can undermine its success. For example, while Wal-Mart engages with environmental NGOs, academics, consumers, and suppliers in an attempt to account for a wide range of environmental externalities along its global operations, other legitimate stakeholders would expect more accurate and responsive information regarding overworked, underpaid and disrespected employees working at different level of Wal-Mart's supply chain. As a result, environmental improvements are often dismissed as 'greenwashing'.

The remainder of this paper is structured into three major sections. First, based on SSCM and accounting literatures, a new more nuanced, multi-dimensional definition of SEV is presented. Next, we explore the role of three important factors that are expected to influence the development of an SEV system. Finally, complementary propositions explore the potential competitive implications of an SEV system.

2. Extending our conceptualization of monitoring

2.1. Monitoring and its shortcomings

Over the last two decades, managerial and research attention about supply chains has gradually expanded to consider, first, environmental, and then societal aspects. Simultaneously, discussions have broadened from a simplified 'chain' to a more complicated 'network' of buying and supplying firms, also known as an extended supply chain. In parallel, sustainable supply chain management research is coalescing around a general conceptualization of and need for monitoring (Awaysheh and Klassen, 2010; Locke et al., 2007; Vachon and Klassen, 2006), among other practices. Sustainable monitoring includes self-managed activities such as establishing supplier evaluation criteria, gathering of supplier information, and the appraisal of environmental and social performance of incoming goods and the suppliers' operations. These activities aim to control inputs, production processes or outputs through an arm's-length practice that evaluates compliance with a purchasing contract, "voluntary" code of conduct, certification system, or regulatory standard.

This conceptualization of sustainable monitoring, however, presents several limitations. First, it tends to assume that data and information coming from different nodes of the extended supply chain are reliable and accurate. Recent scandals, instead, provide evidence of the questionable claims passed along a multi-tier supply chain. For instance, Levi Strauss and Co. found pre-stamped time cards at a factory in Bangladesh indicating the legal amount of hours allowed (McCafferty, 2005). Simple inspections often miss serious problems (Locke et al., 2007; Egels-Zandén and Lindholm, 2014): two of the factories that collapsed in Rana Plaza (Bangladesh) had recently passed audits commissioned by focal firms (Surowiecki, 2013). Thus, because supply chain partners appear to be quite adept at gaming the system, monitoring practices are evolving to include proper verification of any data and resulting information (Gray, 2001; Manetti and Becatti, 2009; O'Dwyer et al., 2011).

Second, the existing conceptualization of sustainable monitoring tends to focus on a small set of environmental and social performance indicators (i.e., energy efficiency, pollutants, worker health and safety, and child labor) when characterizing key operations and main supply chain partners. Narrowly focused monitoring, however, can overlook negative externalities that impact multiple stakeholders, defined as any group or individual who can affect or is affected by the achievement of an organization's objectives (Freeman, 1984). Better scientific understanding and easier stakeholder mobilization around environmental and social externalities gradually have compelled supply chain managers to justify the way they interact with other firms in their supply chain, sometimes being held accountable for issues over which they have little

دریافت فوری ← متن کامل مقاله

ISIArticles
مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات