

Sustainability and Quality: The creation and operation of multi-stakeholder networks in ethical supply chains

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Abstract

This paper presents a conceptual model for the creation and evolution of sustainable multi-stakeholder sourcing (SSS) networks. Existing research on logistics, relationship marketing, cross-sector collaboration, dynamics of cooperation and sustainability literature is reviewed and the contributions from each area presented and synthesized. It is followed by a set of four researchable propositions informed by the literature and by prior research done by the authors. The model and the propositions will form the base of on-going research the authors are currently carrying out in sustainable multi-stakeholder sourcing networks in the coffee industry.

Keywords

Sourcing Networks, Sustainability, Cross-Sector Relationships, Coffee industry, Conceptual Model

Description of the issue

Corporations are increasingly incorporating economic, social and environmental sustainability concerns in their sourcing practices. Be it as a response to consumers' concerns, as an opportunity to increase the value of the brand, to attract ethically conscious investors or from fear of being the target of negative publicity campaigns, an expanding number of corporations are incorporating sustainability concerns in their supply chain strategies¹. Yet, as much as there is a growing consensus on the question *whether* a corporation should incorporate sustainability considerations in its strategy, there is much less clarity among managers and academic experts on *how* this should be done in practice and how it should be incorporated to the existing buyer-seller relationships in a supply chain.

The increase of sustainability sourcing initiatives has been particularly strong in sectors with a strong environmental or natural resources footprint (ex. energy, forestry, fishing), processes that can incur in health or safety risks (ex. fresh meat, vegetables, food ingredients), labor intensive products (ex. apparel, footwear and carpets) and unequal trading relationships (ex. cotton, tea, coffee, cocoa).

A common factor among the initiatives that have been established is that they are cross-enterprise, cross-sectorial partnerships (Arya & Salk, 2006; Bryson, Crosby, & Stone, 2006; Daboub, 2002; de Man & Burns, 2006) Involving multiple stakeholders and both vertical (buyer-seller) as well as horizontal (cross-sector) relationships, these "Sustainable multi-Stakeholder Sourcing Networks" (SSS) represent a new form of supply chain relationship, pursuing simultaneous goals of supply chain efficiency and sustainability. As more and more corporations attempt to balance their business objectives and their social and environmental sustainability programs there is growing interest in gaining a better understanding of the elements and processes of such relationships. The following six research questions are thus proposed:

RQ1: Why do different stakeholders enter SSSs?

RQ2: What are the resources, activities and governance mechanisms present in SSSs?

RQ3: How are these program elements initially defined?

RQ4: How do program elements evolve over time?

RQ5: Why do they evolve over time?

¹ The term has gained wide acceptance after the World Commission Environment and Development report "Our Common Future" was presented 1987, it defines sustainable development as "development that meets the needs of current generations without compromising the ability of future generations to meet their needs and aspirations" (World Commission on Environment and Development, 1987). In this paper, we use it to incorporate environmental conservation as well as economic and social considerations.

RQ6: How can the creation and operation processes be enhanced?

To research these questions, the authors propose a model integrating concepts from logistics (Lambert, Emmelhainz, & Gardner, 1996b), relationship marketing (Harland, 1996), cross-sector collaboration (Bryson, Crosby, & Stone, 2006), dynamics of cooperation (Doz, 1996; Ring & Van de Ven, Andrew H., 1994) and sustainability literature (Arya & Salk, 2006; de Man & Burns, 2006; Roberts, 2003).

It is followed by a set of four researchable propositions informed by this literature and applied to SSS networks.

Research work

A review of the existing literature on dynamics of inter-organization relationships was carried out to identify conceptual models for conducting research in the area of SSS networks:

Why do organizations seek to establish relationships with other organizations?

Management and cross-sector literature refers to three main reasons why corporations may seek to establish relationships with other organizations: 1) to reduce transaction costs (Coase, 1937; Williamson, 1979); 2) to increase market power (Hymer, 1972; Porter, 1980; Porter, 1985); 3) to configure existing resources and to access new ones (Faulkner & De Rond, 2000; Googins & Rochlin, 2000; Pfeffer & Salancik, 1978; Sagawa, 2001). Sagawa (2001) identifies building an improved public identity as a driver for corporations to establish relationships with social sector organizations and Bryson, Crosby and Middleton Stone (2006) propose that cross-sector collaboration will be more likely to occur in situations in which efforts by a single sector have failed to solve a public problem.

How are the activities and the mechanisms of coordination of these relationships defined and how do they evolve over time?

Relationships are influenced by the context in which they are established and economic relations between firms take place within a web of pre-existing social relationships and an institutional environment which constrain the direction and forms in which economic relationship develops (Bryson, Crosby, & Stone, 2006; Grandori & Soda, 1995; Granovetter, 1985). Within this context, partners define the components of a relationship. Håkanson and Snehota (1987; 1995) identify three layers of relationship content: activity links, resource ties and actor bonds. Harland et al. (Harland, Zheng, Johnsen, & Lamming, 2004) build on this typology and propose nine clusters of activity present in the creation and operation stages of a relationship: partner selection (only at the creation stage), resource integration, information processing, knowledge capture, social coordination, risk and benefit sharing, decision-making, conflict resolution and motivation (Harland, Zheng, Johnsen, & Lamming, 2004).

These relationships go through different phases, including a pre-agreement (Scanzoni, 1979) and an engagement phase (Ellram, 1991; Scanzoni, 1979; 1998). Though most of the authors focus on static views of these relationships, Ring and Van de Ven view the process from an adaptation perspective and propose a framework where the development and evolution of a relationship is represented as "consisting of a repetitive sequence of negotiation, commitment, and execution stages, each of which is assessed in terms of efficiency and equity." (Ring & Van de Ven, Andrew H., 1994). Doz (1996) also argues that successful alliance projects are highly evolutionary and involve a sequence of interactive cycles of learning, reevaluation and readjustment.

How can the creation and operation processes be enhanced?

Enhancers and inhibitors or constraints of inter-organizational relationships has been defined as factors influencing creation and operation activities (Harland, Zheng, Johnsen, & Lamming, 2004). Influencers identified in the relationship literature include context factors (Parkhe, 1991) and organizational and personal engagement such as trust and commitment (Morgan & Hunt, 1994; Spekman, Kamauff, & Myhr, 1998), specific investments, staff exchanges (Hines, 1996; Lamming, 1996; Williamson, 1979). Attitudes and behaviours such as long term orientation and adaptation (Metcalfe, Frear, & Krishnan, 1992), conflict resolution (Håkansson & Snehota, 1995) and coordination tools and processes (Lamming, 1996; Lamming, Caldwell, Phillips, & Harrison, 2005; Nohria, 1992) are considered to influence inter-organization relationships. Reaching a fair and balanced division of risks and benefits derived from joint effort is considered important (Grandori & Soda, 1995; Harland, Zheng, Johnsen, & Lamming, 2004; Lambert, Emmelhainz, & Gardner, 1996a) as are "linking mechanisms" (Bryson,

Crosby, & Stone, 2006) and establishing a “congruent understanding of each other’s identity” (Ring & Van de Ven, Andrew H., 1994).

Analysis and Discussion

The following four conclusions were drawn from the literature review: 1) SSS Networks go through different phases and evolves over time (Doz, 1996; Ring & Van de Ven, Andrew H., 1994); 2) In the creation phase of the relationship the initial conditions influence the negotiation process and initial elements agreed upon; 3) Elements of the relationship include the goals, activities, the distribution of risks and resources and the governance and communication system can result from a formal or informal negotiation process and be specified in detail or very broadly; 4) As the relationship evolves and context conditions also evolve, the relationship elements can be re-negotiated and adapted to the new conditions.

Based on these conclusions, the following process framework is proposed:

Figure 1: Process framework of the development of inter-organizational relationships

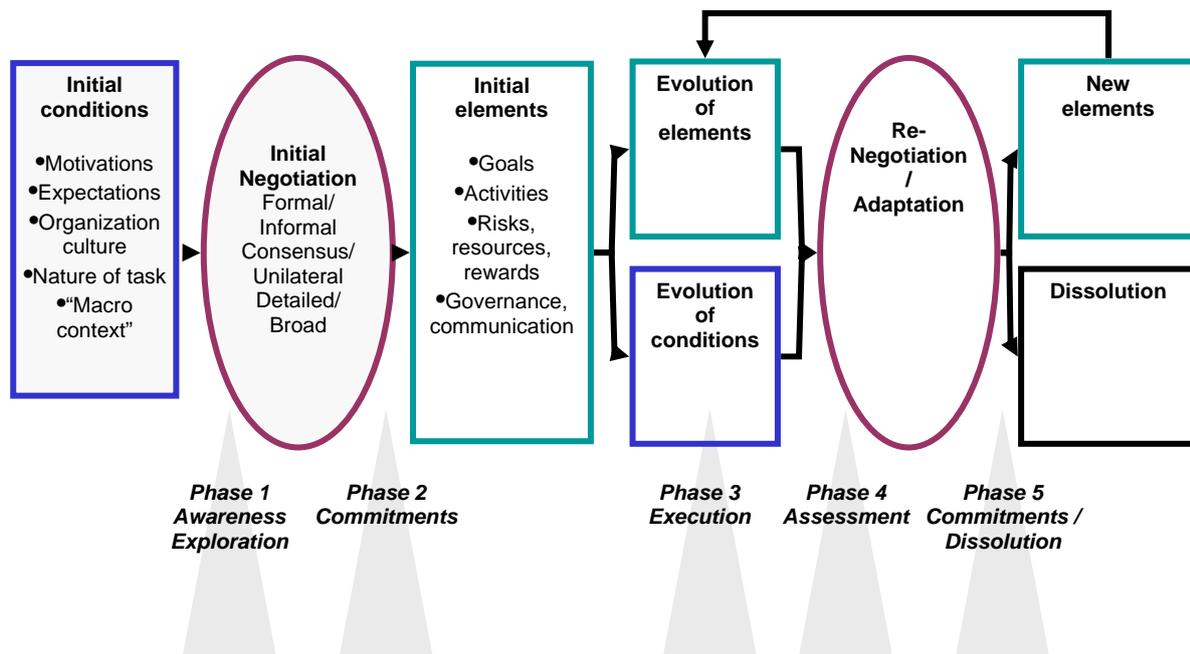


Table 1 summarizes the contributions of literature related to the proposed framework:

Table 1: Literature related to inter-organizational relationship framework

Framework element	Themes	References
Initial conditions	Motivations and expectations	(Bryson, Crosby, & Stone, 2006; Coase, 1937; Faulkner & De Rond, 2000; Googins & Rochlin, 2000; Hymer, 1972; Pfeffer & Salancik, 1978; Porter, 1985; Porter, 1990; Sagawa, 2001)
	Lower transaction cost, increase power, access to resources, reputation enhancement, magnitude of task	
	Organization culture	
	Nature of task	
	Macro context, Institutional embeddedness	(Grabher, 1993; Granovetter, 1985)
Initial negotiation	Negotiation Process	(Page, 2004)
Initial elements	Goals, activities, risks, resources, rewards	(Håkansson, 1987; Harland, Zheng, Johnsen, & Lamming, 2004; Håkansson & Snehota, 1995)

	Governance and coordination mechanisms	(Gereffi, Humphrey, & Sturgeon, 2005; Håkansson & Snehota, 1995; Lamming, 1996; Lamming, Zhang, Caldwell, & Phillips, 2005; Nohria, 1992)
Evolution	Evolution of conditions and of relationship elements	(Doz, 1996; Ring & Van de Ven, Andrew H., 1994)
Influencers	Context	(Parkhe, 1991)
	Organizational and personal engagement	(Faulkner & De Rond, 2000; Morgan & Hunt, 1994; Spekman, Kamauff, & Myhr, 1998)
	Investments or staff exchanges	(Hines, 1996; Lamming, 1996; Williamson, 1979)
	Attitudes and behaviours	(Lewin & Johnston, 1997; Metcalf, Frear, & Krishnan, 1992)
	Balanced division of risks and benefits	(Grandori & Soda, 1995; Harland, Zheng, Johnsen, & Lamming, 2004; Lambert, Emmelhainz, & Gardner, 1996b)
	Linking mechanisms	(Bryson, Crosby, & Stone, 2006; Grandori & Soda, 1995)

To study the particular context of SSS networks a set of four propositions have been derived from the reviewed literature and conclusions from a prior study executed by the authors on sustainability in the coffee industry (Alvarez & Wilding, 2007).

Proposition 1: SSS Networks are more likely to succeed when opportunities exist to assess and to adapt the activities and coordination mechanisms of the relationship and to adjust to evolving context and relationship conditions. Bryson et al. (2006) propose that collaborative structure is “likely to change over time because of ambiguity of membership and complexity in local environments”. A formal or informal process of assessment and re-negotiation, as outlined by Ring and Van de Ven (1994) or Doz (1996) can contribute to increase the initiative’s possibilities of success.

Proposition 2: SSS Networks are more likely to be created and to develop when one or more linking mechanisms (for example inter-personal networks, linking pins personnel, powerful sponsors) are present. Linking mechanisms are considered to be relevant in enhancing supply chain relationships (Lamming, 1996) and inter-firm networks (Grandori & Soda, 1995).

Proposition 3: SSS Networks are more likely to be created and develop when they are effective at dealing with differences in organizational cultures and expectations by process of mutual learning, understanding and trust building processes. Competing institutional logics is believed to influence the extent to which collaborations can agree on its elements (Bryson, Crosby, & Stone, 2006) and repeated efforts of formal and informal negotiation have been associated with increased efficiency and equity of the transaction (Gabarro, 1979; Ring & Van de Ven, Andrew H., 1994)

Proposition 4: Difficulties in quantifying relationship benefits and costs will impact relationship negotiations and the preparedness of stakeholders to invest resources. A fair and balanced division of risks and benefits are important to securing sufficient levels of cooperation and commitment (Grandori & Soda, 1995; Harland, Zheng, Johnsen, & Lamming, 2004).

Conclusions

Though sustainable sourcing relationships have expanded significantly in multiple sectors recently, there is still very little research done to date on inter-sector relationships simultaneously seeking supply chain objectives and sustainability goals. There is also comparatively less research on cross-sector relationships and this literature tends to be static in nature (Doz, 1996).

Building on contributions from literature, especially those by Ring and Van de Ven (1994), Lambert et al.’s (1996b) and Doz’s (1996); the authors propose a framework to study the creation and evolution of cross-sector relationships in the context of SSS networks. The conceptual model informs the research in three key ways. First, it integrates concepts from different areas of literature, offering the

opportunity to integrate multi-disciplinary views on relationships. Second, it explicitly addresses the evolution phase of the relationship. Third, though the framework will be applied to SSS networks, it represents a conceptual model that could be used to study other forms of sourcing relationships. The framework and propositions form the basis of a current field project carried out by the authors in the specialty coffee industry, one of the sector where sustainability efforts were first established (Giovannucci & Ponte, 2005/6; Ponte, 2002; Ponte, 2004). The field project will study the programs Nestlé's specialty coffee subsidiary Nespresso and specialty coffee roaster Starbucks, both of which have implemented these types of programs over the last five years.

Integrating economic, social and environmental sustainability concerns in sourcing practices is a challenging undertaking. Researching cross-sector collaboration in such context is also demanding. But there is an opportunity to contribute both to academic research and to practice in the development of sourcing networks that can simultaneously deliver economic, social and environmental value.

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