



Business Environmental Soundness and Green Supply Chain Management

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Environmental awareness is becoming increasingly central to the thinking of today's organisations. It is now imperative that businesses incorporate a basic level of environmental awareness strategy into their supply chain practices. This briefing looks at how and why this level of environmental awareness may differ across organisations. Some recommendations for managers are then made.

Background

The growing concern of environmental issues and the focus on businesses pursuing green practices creates the question of why some firms are more proactive in their environmental strategies than others. It could be down to different motivations from the company as to the benefits to be gained (e.g. lower costs and increased profitability), a greater concern for the natural environment, or the different strategic responses resulting from an organisation's mission and culture. The capabilities of the Supply Chain function can also affect how proactive a firm is environmentally. The greening of the supply chain is becoming more popular and is something that could potentially contribute to a higher level of environmental soundness within organisations.

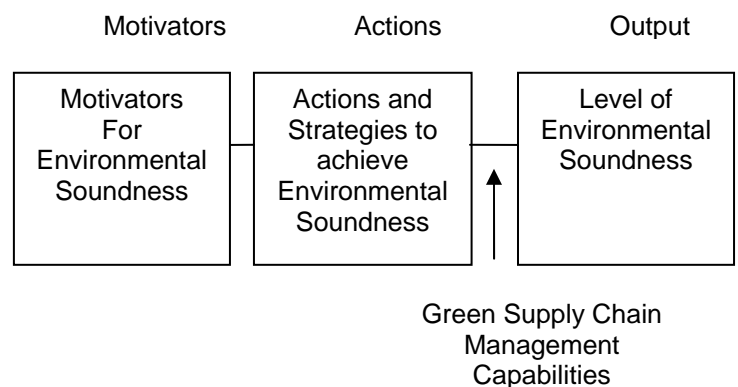
Model Development

The following model (Figure 1) has been developed to help explain the different actors that contribute to differing levels of environmental soundness within organisations.

The model illustrates that there are three factors which potentially contribute to an organisation wishing to pursue a certain level of environmental soundness within the business. The first factor is motivators, which includes legislation, stakeholder pressure, and risks involved. Different industries face varying challenges and therefore their level of environmental awareness is likely driven by different motivators. The first hypothesis is developed from this factor:

H1 - 'The level and types of motivation depends on the type of company and the industry it operates in'

Figure 1 – The Conceptual Model



The second factor, actions and strategies, follows as a response to the environmental motivators. The model assumes that once a firm is motivated to be environmentally sound it will develop certain actions and strategies that will result in the desired outcome. Hart's (1995) Natural Resource Based View of the Firm is included in the model as a framework for which to base effective actions and strategies around.

The second hypothesis is developed from this factor:

H2 - The stronger the environmental motivators faced by a firm, the more proactive its environmental strategic response.

The third factor potentially affecting the level of environmental soundness is the capabilities of the supply chain function, particularly green supply chain initiatives. It is thought that if a firm has a good supply chain function in place, and if suppliers are being selected based on environmental criteria, then an organisation will have a higher level of environmental soundness as environmental actions can be effectively supported by green supply chain initiatives. The third hypothesis is developed from this factor:

H3 - The degree of environmental response will depend on the firm's Green Supply Chain Management capabilities

Method

Nineteen companies from a sample of twenty were interviewed, all from a range of industries. The interviews were carried out using a structured interview technique and the transcripts were then analysed. The interviewed companies were grouped into three industry sectors: manufacturing, retail, and other.

Results

Environmental Motivators

Sixteen motivators (ie. drivers) were then chosen for analysis. Government legislation,

company benefits and greater benefits were the three most frequently cited motivators across all three industry groups. The role of legislation in driving environmental actions was particularly mentioned by respondents in the manufacturing industry, company-specific benefits were mentioned most among organisations in the retail industry, and greater social benefits was mentioned most among organisations in the other industry group.

Environmental Actions

Three headings were used to group the actions and strategies based on Hart's Natural Resource Based View of the Firm: (1) pollution prevention strategies, (2) product stewardships strategies, and (3) sustainable development strategies. The majority of the nineteen companies interviewed had implemented pollution prevention strategies, followed by product stewardship strategies and finally sustainable development strategies being implemented least often.

Green Supply Chain

Green supply chain initiatives were identified and noted against each company. It was found that Unilever, a company in the other industry category, implemented the most green supply chain strategies, followed by EMI in the manufacturing industry and the Body Shop and Nat West in the retail industry.

Discussion

On the basis of the results, Hypothesis 1 was accepted as there were variations in what motivated the companies interviewed based on their industry sector. The most frequently mentioned motivator for the manufacturing industry group was complying with government legislation. This can be explained by their common dealings with hazardous chemicals and materials, for example hardwood was seen as a common talking point when it came to complying with regulations. Interestingly, manufacturers viewed legislation not only as a compliance issue, but also as a trigger to examine their own environmental performance and reduce harmful waste and emissions.

The most frequently mentioned motivator in the retail industry was company-specific benefits, explained by the fact that retail organisations are more visible to customers and portraying a successful and profitable image can be seen as more important, at least from competitive stance, than complying with government legislation.

Customers also emerged as a key driver of environmental action, for both manufacturing and retail firms. Organisations felt the need to take action as a result of a push for environmental improvements by customers and retaining repeat business. Notably, retailers focused on communicating their responsiveness to environmental concerns back to their customers, perhaps due to their increased visibility to end customers. For these

firms risk and public relations management was a key activity.

Hypothesis two was rejected as there appeared to be no direct relationship between the number of environmental drivers and the number of environmental strategies. However, the relationship between environmental drivers and environmental strategies does not have to be dependent on quantity – one key driver could catalyse a number of environmental strategies. All interviewed companies faced at least some form of strong environmental pressure, to which they had sought to respond.

Hypothesis three was rejected as there was no direct trend between environmental strategies and supply chain actions. A possible explanation for this could be the organisations' lack of knowledge regarding the opportunities for improvement through environmental supply chain management (e.g. joint waste reduction, collaborative problem-solving teams). Several companies perceived that green supply chain action involved increased costs. These viewpoints indicate that many organisations would rather direct their environmental strategies at actions other than green supply chain management. In particular, internal activities perceived as lower cost, such as pollution prevention.

Despite the concerns of some companies regarding the outcomes of green supply chain, we did find a positive relationship between working relationships with suppliers and a successful supply chain function. Those

organisations putting more investment into green supply chain management are also investing in close, long-term relationships with their suppliers in order to reduce waste and gain efficiencies.

Recommendations

1. *Identify and respond to the key environmental drivers for your business.* Perhaps unsurprisingly, the most successful firms (at least from an environmental perspective) focused on aligning their actions to the key environmental drivers.
2. *Environmental strategy should be multi-level and temporal.* An organisation should not focus their efforts on just one environmental strategy. A range of short-term, medium-term, and long-term strategies are required across each business unit and function to meet increasing environmental pressures.
3. *Organisations should ensure they become more educated and aware of the benefits of green supply chain management.* Working with academics on this is one way for organisations to become more aware on the issue. Another way would be for them to benchmark an organisation that has a successful and proactive green supply chain in place. This will further aid in strategy development and improved level of environmental soundness.
4. *In order for an organisation to successfully implement a green supply chain it is important they have good working relationships with their suppliers.* Strong supplier relationships make it easier to engage with suppliers on environmental issues, to dictate instructions and standards based on environmental criteria, and to monitor suppliers using score cards or risk assessment. Positive relationships can also be extended to other areas of the organisation, internally and externally, such as with stakeholder groups to achieve better communication and build on an improved corporate image when it comes to environmental issues.



Paul Cousins is Professor of Operations Management and CIPS Professor of Supply Chain Management at Manchester Business School, UK. His research focuses on the area of supply management, environmental supply and inter-organizational relationship management. He has published in a wide variety of journals, including *Journal of Operations Management*, *International Journal of Operations & Production Management*, and *British Journal of Management*.

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