Green Supplier selection criteria

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Introduction
Supplier selection is a process of selecting key suppliers based on a pre established set criteria; it is a useful and an objective way of deciding the right members to deal with in the supply chains. An organization may use Standardized selection criteria or any criteria arising from the organization’s core processes requirements. Standard selection criteria generally intend to cover issues such as quality, capacity in terms of finance, services, and equipments, quantity, responsiveness, and others. Green supplier selection criteria arise from an organization inclination to respond to any existing trends in environmental issues related to business management and processes.

Trends In Business Organizations
Business environment has increasingly become dynamic and the interest of members in business processes including governments, customers, suppliers, and competitors have been changing in response to competition, technological changes, and public concerns.

Tendency of organization to integrate their supply chains in an attempt to reduce costs and be able to better serve their customers and changes in environmental requirements and public pressure on organizations have become a new trends in the business world. These trends together provide an opportunity to exceed environmental expectation of governments and customers through supply chain collaboration; these include an ability to see supply chain members’ commitment to Environmental Friendly Practices. (S. V. Walton, April 1998)

There has been an increasing concern for sustainable economic development all over the world. Governments are trying to adjust legislations and social pressure through individual activists, nongovernmental organizations, and international institutions is also growing to express public mandate against the negative impacts of business activities on environment. Internally, the need to improve organizational efficiency, reduce waste, overcome supply chain risk, and achieve competitive position has made companies to start considering environmental issues from a competitive view point. (P.K Humphreys, 2003)

Organizations Responses To Businesses And Environmental Trends
Organizations respond to the environmental management requirements in many different ways. These responses can basically be grouped as reactive approaches or proactive approaches. (P.K Humphreys, 2003).

The level of inter-organizational relationship or collaboration determines the extent to which an organization can improve its environmental management performance and therefore become either a reactive or a proactive organization. Also, the more engaged the parties in the supply chain are the bigger is the range and quality of environmental performance outcomes; organizations that are closely collaborating
can make the most from a proactive approach to environmental management. (D.Simpson, 2008)

**Reactive and Proactive responses**

Companies with reactive responses tend to use end of pipe solution intending to comply with regulations and avoid penalties by the government because of public and customers’ pressure while those with proactive responses believe that environmental management is a part of the company’s quality and sustainability management. (P.K Humphreys, 2003). *The reactive organizations* focus mostly on their internal functions and their responses vary from resistant adaptation (to avoid penalties and public pressure), through receptive adjustment of the current processes, to constructive responses which are more efficiency based but with secondary environmental advantages; (S. V. Walton, April 1998). Some of the environmental management techniques used by reactive response organization involve:

- Reduction of pollutants emitted into the air instead of pollutant produced,
- Inclusion of basic environmental clauses into purchasing contracts to seek compliance to regulations, and
- Use of established international environmental standards like ISO 14001.

*Proactive organizations* are more innovative and their strategies are specialized to tackle environment challenges. These organizations normally look beyond their current processes and beyond their internal functions (S. V. Walton, April 1998). By integrating other members in the supply chain they increase the range and quality of environment management outcomes (P.K Humphreys, 2003). Some of the techniques used by organization using proactive strategies involve the closed loop supply chain, Total Quality Environment Management in planning and operations, and Product Life Cycle Cost Analysis. Total Quality Environment Management is applied for both products (Specific design, characteristics, and functionality) and for processes (Production, distribution, and use).

**Areas where purchasing can impact environmental management performances:**

Purchasing function in relation with other functions has a greater role to play in environmental management performance of an organization. Zhu and Geng (Autumn 2001) argue that purchasers are key personnel for ensuring environmental preferable decisions in supplier selection and that they are best placed and best qualified to adopt a more environmental friendly purchasing practice. In their study of large and medium sized state-owned enterprises in China, they also acknowledge that a centralized purchasing establishes a foundation for overcoming the failure of senior management to integrate understanding of green purchasing into green supply chains in most such organizations. (Geng, Autumn 2001)
Purchasing can impact many areas including Materials used in product design, Product design processes, Supplier processes, Supplier evaluation and selection, Materials delivery (P.K Humphreys, 2003). Having seen the significance of collaborative supply chain and centralized purchasing in environmental management performance it is now obvious that deciding which suppliers to collaborate with and how to select suppliers is a very crucial decision for the organization performance. Incorporation of objective environmental criteria in the evaluation systems will ensure higher environmental performance in the collaborative supply chains.

**Green Supplier Selection Criteria**

Green supplier selection criteria may be developed with intent of focusing on meeting government regulations, focusing on process improvement, and focusing on buying company’s environmental policy. P.K Humphreys, et al (2003) categorize the green criteria into two groups of Qualitative and Quantitative Criteria. Depending on whether an organization is using a reactive or proactive environmental management strategy, one or both groups of criteria may be used at the same time.

1. **Quantitative environmental criteria:**

These criteria are based on the cost in monetary terms. A potential supplier may incur costs investing in environmental management of its processes or it may be a source of environmental costs because of its destructive processes.

- Pollutant costs/effects: Representing environmental costs caused by a potential supplier.
- Improvement cost: Represent the degree of commitment the supplier has in environmental management.

2. **Qualitative environmental criteria:**

These are more subjective criteria and their application depends on the weight given to each one depending on its importance to the organization or industry and total points score obtained on the bases of the measured parameters.

- Management competences
- Green image
- Design for Environment (DFE)
- Environment Management Systems
- Environment competencies
**Green supplier selection in different organizations**

**RMIT University - Australia**

The Royal Melbourne Institute of technology (RMIT) University observes the following properties for environmentally preferred copy papers (RMIT University, 2008):

- A high post-consumer waste content.
- Is sourced from alternative fibers such as hemp, Benaf and Bagasse.
- Is sourced from plantations that have been managed with consideration of the principles of ecological sustainability, i.e. without employing the use of genetic engineering, native bush clearance, herbicides, and with water quality in mind.
- Has not been chlorine bleached.
This university also uses green purchasing score card to encourage self assessment of
green credentials of different products from different suppliers.

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<thead>
<tr>
<th>RMIT University</th>
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<tbody>
<tr>
<td><strong>GREEN PURCHASING SCORE CARD</strong></td>
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<tr>
<td>Does the product come wrapped in a lot of packaging</td>
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<tr>
<td>Does the product contain a high percentage of recycled material?</td>
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<td>Was the product made locally?</td>
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<td>Can the product be reused?</td>
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<tr>
<td>Can the product be recycled?</td>
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<tr>
<td>Is the product energy efficient and/or conserve water?</td>
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<tr>
<td>Is the product harmful to environmental health--including yours?</td>
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<td>RESULTS</td>
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**Wal-Mart Stores Packaging Scorecard**

Wal-Mart as a company also established a goal to reduce packaging used by suppliers by 5% by 2013. In an effort to achieve this target, Wal-Mart Stores (2006) has announced an innovative scorecard system for manufacturers to rank their current use of packaging. The scores categories include:

- Greenhouse gas emissions produced per ton of packaging,
- Raw material use,
- Packaging size,
- Recycled content,
- Material recovery value,
- Renewable energy use,
• Transportation impacts,
• Innovation.

The Wal-Mart plan is to make purchasing decisions based on this scorecard’s results starting from 2008.

**UW –Whitewater**

University of Wisconsin-Whitewater is a part of University of Wisconsin system and together with other Universities under UW-system they are Wisconsin state agencies and therefore they base most of their purchasing on state policy and contracts that are bid at state level.

The State of Wisconsin has several green purchasing initiatives including waste reduction and recycling. The Wisconsin Bureau of Procurement together with all state procurement agencies want to achieve the goals of recycling and waste reduction in procurement by Revising specifications, Bidding effectively, and Purchasing recycled products (State of Wisconsin, Bureau of procurement, 2008). Specification requirements for products to be bought include:

• Minimize solid waste in accordance with the state solid waste management priorities,
• Favor durable, multiple-use items over single-use disposable products.
• Acknowledge ultimate disposal and recyclability of products.
• Use life cycle costs

With regard to purchasing of copy papers, The State Bureau of procurement’s environmental criteria requires the average post-consumer /recycled content to be at least 40% of all purchased paper and this to be supported by a mill certification. However, The State insists that this requirement does not have to compromise with requirement for competitive market, Reasonable Price, and adequacy of supply.

**References**


