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Strategic Solutions for Sustainable Growth

Supply Chain Management - Greening Leads to Profitability

by Clara Chow

Greening the supply chain is one approach for businesses to be more effective in managing their supply chain. (This is particularly important when the supply chain is a global one.) Opportunities to green the supply chain can lead to more than a competitive advantage. That is, the firm can achieve profitability for the long-term and become competitively sustainable.

Market Forces: Buyer and Supplier Relationships

Before any strategy, especially a greening one, it is important for a firm to understand the market forces of the industry in which it operates. To stay ahead, a company should constantly keep an eye on these influential points because they will change over time, thereby, impacting the business model. When it comes to managing the supply chain, the focus is more on the supplier-buyer dynamics of these market forces.

Buyers have the ability to affect the make-up and subsequent strategy of a company. Because of this, buyers should not be viewed as rivals but rather in a friendly, cooperative relationship based on performance and integrity. Similarly, the relationship with the supplier should be viewed in the same way. Suppliers also hold the potential to have significant leverage in determining the advantages of an individual firm. Therefore, in the supply chain, the bargaining power of the suppliers and buyers will influence not just the competitive advantage of a company but ultimately the competitive sustainability of that company.

Given their influential positions, the critical nature of these relationships is paramount to the success of a business. However, simply fostering these relationships reflects only present thinking. It is equally as important to think about future situations and relationships in order to be sustainable. A firm can stay in front of the industry rivalry curve and have longevity when the strategy addresses external and future needs.

What new buyers or changes in buyer needs will have greater bargaining power? What emerging suppliers will hold more leverage? How can suppliers help a firm sustain growth? By teasing out these questions, this is where greening the supply chain comes into play.

Greening the supply chain: Three drivers

In greening the supply chain, there are three business drivers for profitability. The first driver to promote greening can be in response to rising raw material cost. The second is the result of the availability of substitutes for the suppliers' product/material. The third business driver for this greening strategy can be changes in how suppliers contribute to the quality or service of the industry products.

Looking at the first driver, consider the Boeing/Airbus example. The motivational push for green was due to the availability of a natural resource - oil - and its associated rising cost. While Airbus chose the path of redesigning its larger planes, Boeing's decision was to start anew and think externally as well as for tomorrow. To this end, Boeing was innovative, created a lifecycle management system to assure supplier quality, and put forth a design for the environment: the Dreamliner. This green aircraft helped Boeing hold a competitive advantage by offering a fuel efficient product to a growing aero industry market, the long-hurls. It also enabled the company to advance as a sustainable enterprise because the company addressed its buyers' priorities as well as their concerns of escalating energy prices.

The second driver in greening the supply chain can be prompted by disruptive innovations. This is in the form of creating substitutes for natural resources or raw material. In green business, waste streams and outputs can be the next "it" input resource for suppliers. A good example is crumb rubber instead of virgin rubber. Crumb rubber is made from the shredding of discarded tires. As a substitute raw material at a lower price, this can help manufacturers reduce their production costs, thereby, increasing profit margins - especially since consumers do not care if the product is made with crumb rubber or virgin rubber as long as the performance and other purchasing factors remain the same. Subsequently, crumb rubber is gaining as a direct competitor to virgin rubber suppliers, especially in India and China where the demand for rubber has been rapidly growing. Crumb rubber is beginning to become an important commodity and can grab some of the rubber market share. With a lost in market share, the bargaining power of virgin rubber suppliers weakens, particularly in the construction (road and cement) and manufacturing (plastics and artificial turfs) industries.

Lastly, the third driver of greening the supply chain relates to how suppliers provide value-added quality and service to an industry's products. As a producing firm, it is necessary to acquire components, such as chemicals, specific material, and semi-constructed parts from other suppliers. More often, these suppliers tend to be small to medium size companies because of the inherent cost savings in doing business with them. And because they are small to medium size businesses, these suppliers may also lack the sophistication and technology that the larger, producing firm possesses. This may result in the suppliers being inconsistent or minimally meeting standards in their contribution to the quality and service of the industry product.

Moreover, a manufacturing process with waste and inconsistent input quality costs money. This also cuts into the profit margin. Internally, a manufacturer can cut costs by streamlining its own production line, reducing waste streams, and establishing standardization. Externally, the manufacturing firm can gain even more operational control as well as cost savings if the input quality and service were consistent. To accomplish this, the manufacturing company can: (1) partner with its suppliers, (2) establish purchasing guidelines, and (3) help its suppliers find ways - such as through technology transfer - to modernize, achieve efficiency, reduce their own waste output and cut cost.

Conclusion

Greening the supply chain is one method to control and enhance quality, increase production savings, address buyers' needs, and improve the bottom-line. It also intensifies the bond of crucial business relationships. The tangible and intangible results extend beyond the balance sheet, and they become a building block for a firm to not just have a competitive advantage but be competitively sustainable. Hence, as a firm designs and manages its supply chain, green market and non-market factors - key drivers - need to be part of the consideration and integrated into the business model.

About the Author

Clara Chow has an extensive background in management and sustainable development. Along with consulting, she authored and delivered seminars and training programs pertaining to the subject of green business/sustainable enterprises. This includes greening the global supply chain, green innovations, and effective organizational diversity communication.
Ms. Chow is a Sloan Fellow graduate with a Master of Business Administration from the MIT Sloan School of Management. She also has a Masters in Environmental Engineering from Cornell University and a Bachelor of Science in Civil Engineering from Tufts University.