Applying the 3C's of Sustainable Development to Defense Acquisition Planning

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The Issue

- The DOD Appears to be making a significant shift in Energy Acquisition Strategy
 - What are the Implications of this Shift?
 - What are the drivers of truly efficient efforts at making this shift?



Our Approach

- Review Recent Work on How MNC's are approaching Corporate Social Responsibility.
- Why?
 - Identify Lessons
 - Understand Drivers of Decision Making
- Identify Characteristics that make good acquisition partners.
- Highlight Implications for DOD Acquisition



Unit of Analysis

- Economically Viable Global Firms
- Initiatives with a Social Component
- Not Coerced

<u>Corporate Social Initiatives (CSIs)</u>, are formally defined as the initiatives of global, commercial organizations that appear aimed at furthering some social good beyond the interests of shareholders and beyond that which is required by law.

(cf. McWilliams & Siegel 2001; Melo & Galen 2011).



Types of CSIs (Maltz et.al. 2011)

- Negative **operating** externality reduction, refers to efforts to mitigate societal costs associated with making a product available for consumption.
- Negative consumption externality reduction refers to efforts to mitigate the costs imposed on society by consumption that imposes uncompensated costs on society.
- Positive operating externalities can result from commercial activities that create, maintain, or enhance the operations of others.
- Positive consumption externalities are consumption experiences created by firms which reduce costs or create values that do not accrue to the firm.



Examples of CSI's at the DOD

	Negative	Positive
	Externality Reduction	Externality
Operational	Military allocating	Military investing in
	resources to reduce use of	education programs—
	high carbon fuels.	ultimately many soldiers
		use these skills after retiring
		from military
Consumption	Military allocating	Military personnel carrying
	resources to encourage	lessons for conservation to
	energy conservation	broader society.



Measurement of Efficiency of CSIs

<u>Shared value</u>: The total of economic and broader societal benefits generated by the CSI minus the economic and social costs associated with implementing the initiative (cf. Porter and Kramer 2006, 2011; Maltz, Ringold and Thompson 2011).



The 3 C's Approach to Maximizing Shared Value

Shared value of CSI's will be maximized when a firm has:

- the <u>capability</u> to create significant value, (resource based view of the firm)
- the value of an initiative can be <u>consistently</u> applied to both the firm's economic and some other social value, (stakeholder theory)
- the social value of the initiative can be <u>cultivated</u> by other entities.



Exploratory Study

- Over fifty 30-60 minute interviews
- Subjects were mid-upper level executives with responsibility for coordinating CSR/Sustainability Initiatives for Fortune 500 firms
- Asked to discuss successful and unsuccessful initiatives. They were prompted with our definition of success (i.e., the shared value perspective). Many were already familiar with the concept. Few were actually systematically estimating shared value of initiatives.



Capabilities and Success

- "_____" pursued mentoring opportunities to help in design and flow through process engineering expertise, quality, and production expertise. Manager, Natural Resources at a consumer products company discussing aiding an organization with a social mission to become a partner.
- We consider ourselves enablers. What we have found is that the key to deploying technology at scale is to be able to manufacture it affordably. We are trying to drive solar down to cost parity with fossil fuel. In the case of solar there is an implicit social mission. Head Corporate Responsibility and Sustainability, Capital Equipment Company discussing the company's quest to increase solar power usage.
- We are also the only large coffee company who has an agronomist in the coffee growing regions and offer the expertise for free to make their growing practices more sustainable. Director, Environmental Affairs, Coffee Company.



Implications for Acquisition

- Make Or Buy
- Do Current Partners have capabilities required to transition to new energy regime.
- Are non-traditional partners a better source of required capabilities?



Consistency and Success

 Social value is a function of the economics . Our efforts consider the at societal value. The things described above are investments that will lead to social value. But it is not the key driver of the *initiative.* Head of Corporate Responsibility and Sustainability Capital Equipment Supplier.



Consistency is in the Eye of the Beholder

- Economics First Firms
- Emerging Systems Firms
- Mission Driven Firms



Economics First Firms

 Economics was the prime driver. We had created this new division Energy and Environmental Solutions. I recall our chief technology officer describing the alternatives. We were interested in getting into the energy area and all of the solutions were alternative energy solutions (renewable or energy efficiency). However, energy was chosen because of the size of the market coupled with our own know how making renewable energy a good bet. Head Corporate Responsibility and Sustainability, Capital Equipment Company



Emerging Systems Firms

• One of the things I drove at (electronics firm) was that you can't divorce social and economic value. In an electronics company you always need to look at performance, cost and quality, so employees were used to optimizing across multiple factors in their design. We realized that social issues, with a primary focus on sustainability should just become a fourth criteria. Eventually, sustainability became a good lens for looking at inefficiencies. Corporate Sustainability Officer, **Electronics Company**



Mission Driven Firm

- It started with our founders. When they set up the company it was with the philosophy of making a profit as simply a means to improve society. It is in our DNA. It permeates the company and employees come to our company because of this philosophy. ...Sustainability is embedded in our product and businesses. It is not a bolt-on. We always do believe that an initiative needs to be good for the business, customers, and the environment. It is not philanthropy. It is business. VP, Environmental Sustainability, Technology Conglomerate
- At (coffee company) the idea that we can do something that benefits society and the firm imbues everything that we do and has always done so from the origins of the company. VP Corporate Social Responsibility, Coffee Products Company



Implications for Acquisition

- Perceived inconsistency reduces efficiency of transition particularly where current partner has economic interests to maintain the status quo.
- Can mission driven enterprises be a better fit?
- Measurement of consistency
- Low Hanging fruit is clearly Negative
 Operational Externality Reduction
- Military has a strong role to play in reducing Negative Consumption Externality



Methods of Cultivation

- Influence Supply Chain
 - Wal-Mart-(Described in Maltz et.al. 2011)
 - Eliminate Bottled Water (From Interviews)
- Competition
 - Wal-Mart (Described in Maltz et.al. 2011)
- Sharing Technologies with For Profits
 - "We're working with technology companies like IBM, HP, and INTEL to create solutions across the supply chain and around the world to produce information in real time. Technology as an enabler of sustainability is still in its infancy. A lot of the green IT market at the moment is IT addressing its own problems. IT will then enable the world to reduce the remaining 98% of emissions through smart buildings, smart logistics, smart transportation, smart electric grids." Director of Sustainability – Global Consulting Firm



Implications for Acquisition

- Military has in the past utilized all of these strategies to some degree. Should be intentional in utilizing them currently.
- Look to provide technical expertise to partners for the shift
- Look to declassify proprietary technology earlier.
- Look for synergies
- Explicitly model cost reductions due to faster realization of economies of scale.



Sharing with Mission Driven Firms

- Our lever is to bring (our technology) to the social entrepreneurs of the world, allowing them to become more efficient and effective. Chief Technology and Sustainability Officer of a B-B Software Company.
- We donate lots of equipment to academic institutions. Head Corporate Responsibility and Sustainability at a Large B-B Hardware Firm.



Implications for Acquisition

- Look to non-traditional mission driven partners.
- Develop structured ways of assessing them as partners.
 Look for interesting synergies.
 - Look for mission driven enterprises that have a collaborative culture and/or have missions consistent with this particular initiative of the military—move toward energy acquisitions shift.
 - Assess their potential to really accelerate cultivation.



Discussion

- The move toward a shift in energy regime is big—akin to the shift from coal to oil mandated by Churchill for battleships—only the energy landscape is much more complicated now.
- Assess where you want to develop internal competencies and where you want to partner
- Use the 3 C's as inputs into decision making.



My Directions For Future Research

- Measurement of Shared Value, Consistency, Cultivation
- Large Scale Empirical Tests of the Model

