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Article abstract

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A Framework for Strategic Sustainability in Organizations: A Three Pronged Approach

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Sustainability has become an increasingly important strategic concept for organizations. The idea of sustainability is also starting to become ingrained in various managerial and organizational decisions. Sustainability in an organization is defined by its commitment to economic factors, environmental factors, and factors of social commitment in a firm. A framework is used to develop a strategic or long-term justification for the concept of sustainability. Also, this study attempts to extend the concept of sustainability and decision making to a global business environment. This study proposes a mission-driven management methodological framework that acts as a base for decision-making using the concept of international strategic sustainability. This contribution includes investigating the design and development of strategic sustainability and combining the relationships of organizational decision-making to economic, environmental, and social sustainability outcomes.

1. Introduction

The notion of strategic sustainability is shown in the broader strategy literature. Initially Porter (1995) focused primarily on value creation for buyers, and posited that competitive advantage grows fundamentally out of value a firm is able to create for its buyers that exceeds the firm's cost of creating it. By 2008, R. M. Grant was suggesting that business is about creating value added by firms and is distributed among different parties: employees (wages and salaries), lenders (interest), landlords (rent), government (taxes), and owners (profit).

In addition, firms also create value for their customers to the extent that the satisfaction customers gain exceeds the price they pay (i.e., they derive

consumer surplus) (Grant, 2008). Furthermore, Coff (2010), notes that profit is merely the residual left after some value has already been allocated to or appropriated by employees, other suppliers, or stakeholders more generally.

Ghemawat (2010) equates competitive advantage and value creation, noting that a business has added value when the customers and suppliers in which it operates are better off with it than without it—that is, when the firm offers something unique and valuable in the marketplace. As such, sustainability can be defined as a business approach that creates long-term shareholder value by embracing opportunities and managing risks deriving from economic, environmental, and social developments. Sustainability can also be defined in such a way that it suggests that its existence is guaranteed as long as the environment created by humans is compatible with the natural environment and by a social-human dimension signifying that all that exists from the human-created environment must answer directly to the present and future generations' needs and interests. The combination of these two definitions is the working definition we will adopt for strategic sustainability. I suggest that the emphasis on value creation in both the strategy and sustainability literatures—along with the growing interest in the measurement of stakeholder value creation—reflects a broad momentum of convergence between the two fields. In fact, Porter and Reinhardt (2007, p. 22) argue that "business leaders need to approach global warming in the same hardheaded manner as any other strategic threat or opportunity."

Sustainability is more than being responsive to ecological concerns. It includes economic, legal, ethical, and discretionary responsibilities depicted by Carroll (1979). At the time Carroll introduced his *Model of Corporate Performance*, environmental responsibility and sustainability were considered to be primarily in the domain of ethical and discretionary responsibilities of a business. As ecological concerns grew, governments passed laws and imposed taxes and restrictions on pollution, carbon emissions, etc. and the legal responsibilities have somewhat expanded to include environmental sustainability. However, today's natural environment, the diminishing natural resources, the climate change and global warming impose significant constraints to the way businesses operate.

In fact, according to a McKinsey & Company survey conducted in 2008, more than 50% of the executives selected environmental issues, including climate change as the most important issue facing them over the next five years (Bonini, Hintz, & Mendonca, 2008). As Porter and Reinhardt (2007, p. 22) put it:

> Companies that persist in treating climate change solely as a corporate social responsibility issue, rather than a business problem, will risk the greatest consequences. Of course, a

> company's climate policies will be affected by stakeholder expectations and standards for social responsibility. But the effects of climate on companies' operations are now so tangible and certain that the issue is best addressed with the tools of the strategist, not the philanthropist.

In a fashion that mirrors the internal and external audit of a firm's strategic situation, Porter et al. (2007) suggest business leaders use an "inside-out" perspective to examine the effect of the firms' activities on the climate and "outside in" perspective to better understand how changes in the natural environment impact the environment in which the businesses operate. By examining the value chains, firms can pinpoint the carbon footprint of their activities from inbound logistics to service, and by looking outside, firms can better understand and track the changing weather patterns, the carbon emissions regulations, which in turn affect the availability of inputs, demand for the products, etc. According to Schwartz (2007), climate change may affect supply chains, employee migrations, disease, and even the reputation of companies. This is especially true for multinationals, which undergo increased scrutiny as it is.

Sustainability not only helps companies to reduce the backlash they face from the governments and the public, but it also makes business sense. By looking inside with an effort to reduce the carbon emissions, firms may be able to reduce their costs by streamlining their activities. Similarly, climate change and global warming do not only pose threats but also present businesses with some opportunities. The firms that capture these opportunities by aligning their competencies with them are more likely to enjoy advantages similar to those of the first movers. Furthermore, the burden and risks associated with the first movers may be reduced with government incentives, e.g. the $789 billion Stimulus Bill of 2009.

2. **Sustainability**

Sustainability as a concept has been referred to in the literature for many years, yet the term still lacks a working consensus. The most common definition of sustainability is the one provided by the World Commission on Environment and Development that it as "development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs" (WCED 1987: p. 43). Within this broad definition, sustainability provides a framework for managing the development of communities, nations, regions, and essentially meeting global needs to ensure efficient resource use, creation of infrastructures, security for enhancing the quality of life, and creation of new businesses to build and strengthen economies. Sustainability is often seen as a community or institutional response to threats

against human and planetary survival (Presley & Meade, 2002). Indeed, the framework presented in this paper, ideally, will help firms link the challenges of global sustainability to the creation of shareholder value.

Although slow to come to fruition, businesses have taken the initiative to identify and capture value from the concept of sustainability (McMullen, 2001). Sustainability has become a strategic factor for businesses in the twenty-first century and has evolved into a basic and fundamental competitive market force affecting short-term and long-term financial viability and success (Orlitzky, et al., 2003). "Using this idea as a foundation, some have categorized sustainability into three primary components often referred to as the 'triple-bottom-line': economic, social, and environmental components (Robins, 2006) (Presley, 2007)."

Fundamentally, organizations are aware that choices made about their products and processes can have profound environmental and social implications (Sarkis, 2001). While this is still an evolving situation, organizational decision-makers now have to take into account many, if not all stakeholder issues, pressures by environmental agencies and increased social consciousness towards workers, consumers, and communities (Presley, 2007)." While this is admirable, this organizational stance must be balanced with ensuring a return on investment and long-term enterprise viability for organizational stockholders.

3. **Justification**

A fundamental question therefore, is why a firm must consider sustainability-related corporate initiatives given the pressures on the organizational decision-makers. The answer is a rather complex set of stakeholder pressures acting on the firm. The firm must then develop tools and approaches to offset the stakeholder pressures. While these tools and approaches do exist in the literature and in practice (related to the environment and sustainability), this proposal suggests that there are some weaknesses apparent in these tools and approaches. For example, many studies fail to address all factors related to environmental impact, limited criteria integration (especially integrating qualitative and quantitative criteria), difficulty in considering and integrating stakeholder and social requirements, and tool selection (Baumann & Cowell, 1999, Veleva & Ellenbecker, 2000). In addition, a part of the justification tools requires the use of "traditional" financial decision tools for the evaluation of corporate programs and projects with sustainability implications that may not be compatible with a stakeholder-mediated decision-making process. As such, an examination of some of the problems with these traditional evaluation approaches for evaluation and justification of sustainable practices is warranted.

4. Customary Approaches for Organizational Decision-Making and Evaluation

Traditional justification evaluations such as return on investment, and discounted cash flow techniques tend to be financially oriented and short-sighted. "While these justifications are not negative in and of themselves, these characteristics have sometimes caused difficulty in strategically adopting projects and programs, especially with tangible and intangible benefits that cannot be represented by traditional justification approaches (Presley 2007)." The literature has suggested that the justification and adoption process for strategically oriented programs is difficult, due to high capital costs and risks, misguided capital budgeting decisions, technological uncertainties, and general myopic approaches to strategic sustainability justifications (Lefley & Sarkis, 1997).

Cultural and organizational issues are another problem afflicting the justification and adoption of strategically focused programs. The success or failure of the implementation of strategic sustainability programs depends on a consensus by top management decision-makers. This study suggests that traditional methods of justification do not consider these organizational influences and are ill-designed for group consensus building. Indeed, a sustainability-driven consensus-building justification includes a corporate analysis of a sustainable system to consider their tangible, intangible, strategic, tactical and operational characteristics. We now discuss other non-traditional justification models and characteristics that attempt to address some of these concerns.

5. Non-Customary Long-Term Sustainability and Justification

Perhaps non-traditional justifications are needed to fully assess strategic sustainability in the current business climate to support strategic initiatives and strategic decision-making. Surely, strategic decision-making is a comprehensive and ongoing management process aimed at formulating and implementing an effective comprehensive plan for accomplishing an organization's goals (Griffin, 1999). Strategic decisions influence multiple functions within an organization over long periods. "Although models and tools that have introduced broader sustainability dimensions into their analysis do exist, they are at public policy levels of regional or industrial-level analysis (Hersh, 1999) and include such areas as sustainable forestry (Mendoza & Prabhu, 2000), energy (Pohekar & Ramachandran, 2004) or infrastructure planning (Dasgupta & Tam, 2005) (Sarkis, Presley & Meade, 2006)."

At the supply chain level, the study of strategic sustainability justification and evaluation tools is limited but growing quickly. For this study,

we use the organizational level of analysis to further the concept of strategic sustainability and provide a useable framework. Research on developing a business case for strategic sustainability has occurred at a business level of investigation, focusing on implementation and introduction of sustainability concepts into the decision-making of organizations (Dyllick & Hockerts, 2002; Holliday, et al., 2002; Epstein & Roy, 2003).

To further this framework, I examine Salzmann et al. (2005) that reviewed the theoretical frameworks and tools that have been developed over the last ten years that firms used to justify their sustainability strategies. What was found was a categorization of tools into three broad categories: collections of evidence, coaching, and valuation tools. As previously stated, the complexity and long-term sensibilities of top level decision-makers of corporate sustainability approaches, "act as barriers in creating a case for strategic sustainability (Presley, 2007)."

6. **Strategic Initiatives for Strategic Sustainability**

The various initiatives proposed in our framework determine the firm's activities and strategies that are influenced by firm attitude and culture. We must assume the firm has a vision, mission, and objectives, and is seeking to evaluate the system within the context of these strategic elements. It is also assumed that the firm has at least a rudimentary strategy-to-objectives linkage that then filters down to tactical and operational functions. For the framework to be functional, the firm is ultimately free to choose whichever strategies it deems appropriate. It is important to note that the strategic sustainability initiatives should be derived from the overall firm strategies already in place. With this in mind, once sustainability strategies are identified, they are included as part of the firm's sustainability initiatives. Thus, once the strategies are identified, a set of strategic sustainability initiatives can be developed within the framework of the overall firm strategic decision-making process.

7. **Classification**

While many classifications of initiatives are possible, this framework has focused on incorporating sustainable concepts by organizing the initiatives into the 'triple-bottom-line' categorization of sustainability (Economic, Environmental, and Social) while dividing them into proposed strategic, tactical, and operational initiatives within each of these categories. The rationale is derived from a number of sources (Epstein & Wisner, 2001; Graedel & Allenby, 2002; Labuschagne, et al., 2005; Sarkis, Presley, & Meade, 2006).

Economic

The Economic (or business) category identifies programs measuring the interaction with relevant customers and market segments that contribute to financial goals. "Direct strategic measures of financial and business performance, such as net present value, returns on investment, delivery performance, and supply chain cycle time may be introduced (Sarkis, Presley, & Meade, 2006)." From these strategic initiatives, tactical and operational initiatives may also be used (see table 1). An enterprise requiring sustainability-specific financial initiatives would include them in this category. "Additionally, indirect measures of economic and business performance such as those related to process performance and supply chain interactions may also be incorporated (Sarkis, Presley, & Meade, 2006)." For a company reaching for practices that are sustainable, the concept of customers and markets should be quite encompassing and defined to include its shareholders, and local and global communities that would otherwise not be directly associated with the financial health of the organization (Presley, 2007).

Environmental

The Environmental category may include strategic initiatives such as environmentally proactive organization, waste reduction, and improved compliance, for example. The tactical and operational initiatives would result from the strategic initiatives selected. Examples of these are shown in Table 1.

Social

The Social category of possible strategic initiatives includes factors such as human resources, the overall population, the extent of stakeholder participation, perceived aesthetics, education level, and goodwill. Again, the tactical and operational initiatives would be based on the desirable strategic social programs selected and examples of these are in Table 1.

8. **Framework**

In an operational and competitive perspective, firms have seen the quantity of returned products increase significantly. This growth has resulted from increased focus on customer satisfaction, a total quality management initiative, and other firms using free return policies as a competitive advantage initiative (Blumberg, 1999; Chouinard, 2005).

From a strategic sustainability perspective, the costs, such as the development and implementation of the technology to carry out return policies, should ultimately lead to intangible benefits. Direct benefits, on the other hand,

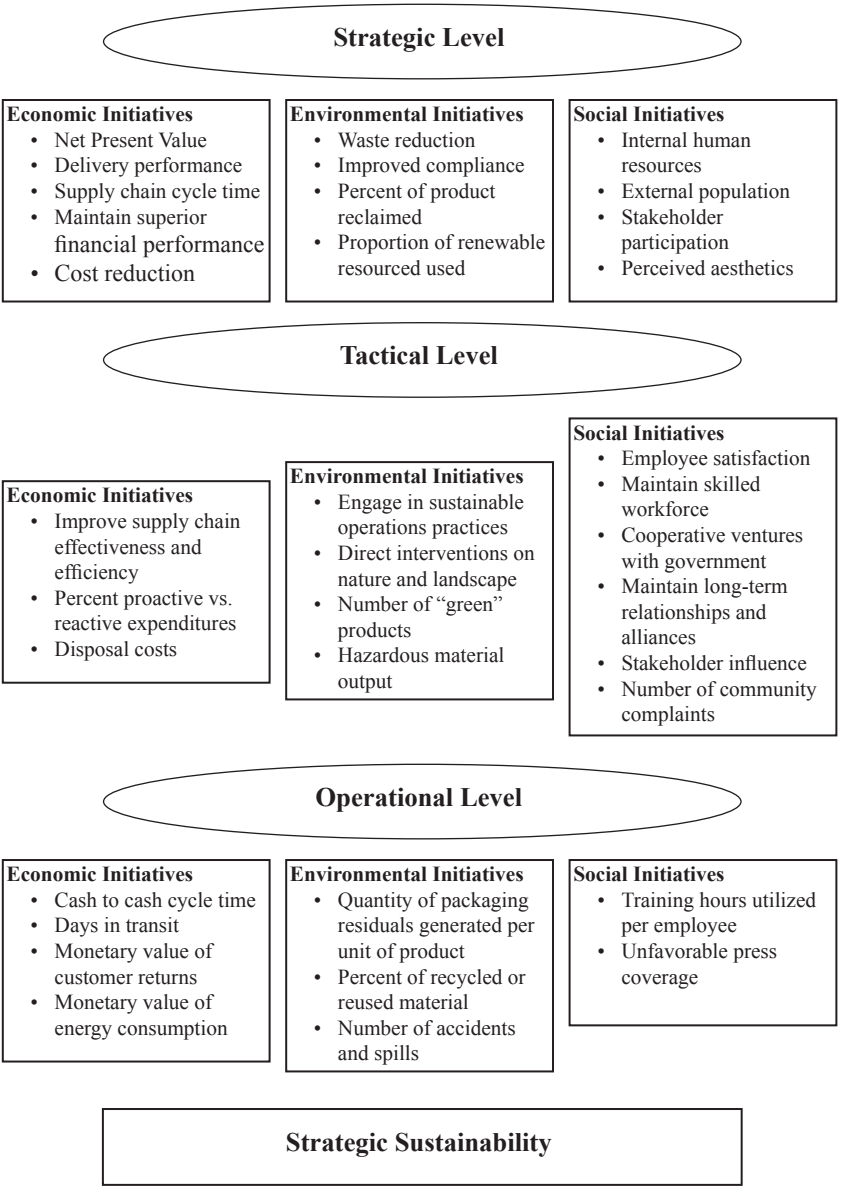
include profits from recovery actions. For example, reducing material usage and then leading to perhaps intangible and competitive benefits associated with improving the image of an organization or providing a return service to consumers of an organization's products. Indirectly, these initiatives should lead to an improved corporate image and also may lead to higher sales and profitability.

Of note is that while the standard cost/benefit analyses of payback, return on investment, and net present value calculations should be considered, operational and business service factors that influence the efficiency, productivity and customer service dimensions of an organization also need to be considered as well.

Table 1: Proposed Sustainability Indicators and Initiatives

	Economic	**Environmental**	**Social**
Strategic	Net Present Value Delivery performance Supply chain cycle time Maintain superior financial performance Cost reduction	Waste reduction Improved compliance Percent of product reclaimed Proportion of renewable resourced used	Internal human resources External population Stakeholder participation Perceived aesthetics
Tactical	Improve supply chain effectiveness and efficiency Percent proactive vs. reactive expenditures Disposal costs	Engage in sustainable operations practices Direct interventions on nature and landscape Number of "green" products Hazardous material output	Employee satisfaction Maintain skilled workforce Cooperative ventures with government Maintain long-term relationships and alliances Stakeholder influence Number of community complaints
Operational	Cash to cash cycle time Days in transit Monetary value of customer returns Monetary value of energy consumption	Quantity of packaging residuals generated per unit of product Percent of recycled or reused material Number of accidents and spills Violations reported by employees	Training hours utilized per employee Unfavorable press coverage

Figure 1: Framework for Strategic Sustainability


Strategic Level
Economic Initiatives
• Net Present Value
• Delivery performance
• Supply chain cycle time
• Maintain superior financial performance
• Cost reduction
Environmental Initiatives
• Waste reduction
• Improved compliance
• Percent of product reclaimed
• Proportion of renewable resourced used
Social Initiatives
• Internal human resources
• External population
• Stakeholder participation
• Perceived aesthetics
Tactical Level
Economic Initiatives
• Improve supply chain effectiveness and efficiency
• Percent proactive vs. reactive expenditures
• Disposal costs
Environmental Initiatives
• Engage in sustainable operations practices
• Direct interventions on nature and landscape
• Number of "green" products
• Hazardous material output
Social Initiatives
• Employee satisfaction
• Maintain skilled workforce
• Cooperative ventures with government
• Maintain long-term relationships and alliances
• Stakeholder influence
• Number of community complaints
Operational Level
Economic Initiatives
• Cash to cash cycle time
• Days in transit
• Monetary value of customer returns
• Monetary value of energy consumption
Environmental Initiatives
• Quantity of packaging residuals generated per unit of product
• Percent of recycled or reused material
• Number of accidents and spills
Social Initiatives
• Training hours utilized per employee
• Unfavorable press coverage
Strategic Sustainability

Environmental factors are sometimes cited as a driver for implementing strategic sustainability initiatives (Chouinard, et al., 2005). The firm must cope with regulatory issues, market and customer pressures, and ethical motivations to improve environmental performance. Of particular note is the fact that business and environmental factors are often related. For example, consumers are now fully aware of environmental considerations when making purchase decisions. As awareness of environmentally friendly products has increased, so too has the need to implement effective handling of waste and hazardous materials.

Consumers demand that a firm act responsibly with respect to waste removal. In addition, consumers are increasingly searching for firms that actively implement sustainability initiatives that will lengthen a product's or material's life, because such an extension of the product life will typically have environmental benefits (Murphy & Poist, 2003; Richey, et al., 2005).

Although, businesseconomic and environmental issues have been aligned and discussed within the literature, the discussion of social dimensions of strategic sustainability has been scarce. Most of the strategic sustainability initiatives come in the form of the firm's influence on social dimensions; that is, some organizations or industries are somewhat predisposed towards socially beneficial sustainable practices. For example, safety issues for employees that work closely with hazardous materials, such as chemical industry products, will necessarily be less safe from a hazardous material exposure perspective, than to manual activities that would be more benign, such as maybe in the automobile industry. Moreover, consumers are increasingly becoming adept at identifying problems in the quality of a firm's activities and operations. Consumers will have to bear the burden of the lack of quality.

The firm then will necessarily enter into the less lucrative market of remanufactured materials. Another example is found in the electronics and shipbuilding industries in which, as products that are produced in developed countries are sent to less developed countries for "remanufacture", are in reality dumped on the local populations, even if these products contain significant hazardous materials (Basel Action Network, 2006a, 2006b).

Thus, briefly, we see that profound social dimensions will indeed impact the strategic sustainability initiatives and as such, need inclusion in the overall strategic sustainability decision-making process for a firm. The social issues are more profound than what we can present in this article, but the overall framework for the strategic sustainability initiatives are proposed in Figure 1.

9. **Conclusion**

From a pragmatic point of view, strategic sustainability should start with this study's proposed three dimensions of strategic sustainability (economic, environmental, and social) rather than with the traditional metrics used by firms. The transformation to strategic sustainability then proceeds to infiltrate the firm in all levels of the decision-making process. Underlying the framework is that the three seemingly separate aspects of sustainability (economic, environmental, and social) should be transformed into an all-inclusive approach to strategic sustainable decision-making process.

In addition, to fully reach organizational strategic sustainability, the demands of stakeholders must be endlessly fulfilled. Indeed, the demands, wants, and expectations of stakeholders should become an accepted input for strategic management in their sustainability goals. This framework suggests that all parties related to the firm, from all stakeholders to, ultimately, the end consumer must be involved in the decision-making process.

Although stakeholders vary from organization to organization, and their wants and expectations vary over time, our framework is provided for only a "moment of time." Subsequently, any strategic sustainability decision-making should be continuously updated. Figure 1 shown below attempts to support this framework. In addition, attempts to provide a way for firms to integrate the ideas of strategic sustainability to all levels of the firm even if only for a cross-section of time, must be an ongoing continuous process. Ultimately, the strategic justification of sustainability remains an area of concern to both academics and practitioners. To address some of the gaps and limitations of the aforementioned tools, this study has provided a framework that integrates the various sustainability and business decision-making dimensions.

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