



ISSN: 1934-4244

## **THE SUSTAINABLE ADVANTAGE**

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## Introduction

A new age is dawning within the world of business and many companies still fail to recognize the true meaning and importance of its defining concept: environmental sustainability. Experts from *The Harvard Business Review* have indicated that sustainability is the “key driver of innovation” within today’s business world (Hudson and Rogers 3). Experts make the distinction that smart companies recognize it as the newest innovational frontier (Nidumolu, Prahalad, and Rangaswami 4). They also show that it is one of the most important new challenges that face businesses today and will require commitment from companies at every level (Hudson and Rogers 3). Companies who have devoted their attention and investments wholeheartedly to this new frontier have conclusively and substantially lowered input costs, increased revenues, enhanced competitive advantage, and created entirely new avenues of business (Nidumolu, Prahalad, and Rangaswami 3). Companies should not focus on environmental sustainability as a concept that is separate from their economic bottom line. Instead companies must recognize that environmentally sustainable business is simply one of the most effective ways to reduce input costs, enhance profitability and create tremendous competitive advantage. Therefore, top management must voluntarily implement initiatives that aim to make their company more sustainable in order to harness the tremendous potential that environmental sustainability has for enhancing their economic bottom line.

### Defining the Role of Environmental Sustainability in today’s Business World

The director of the Center for Business and the Environment at Yale University, Daniel Esty, has classified environmental sustainability as the new megatrend within today’s business world. He defines a megatrend as “incipient societal and economic shifts such as globalization, the rise of the information society, and the move from hierarchical organizations to networks” (Lubin and Esty 2). Now, they suggest that environmental sustainability is on par with globalization and the information age is an exaggeration; however, Esty along with his co-author Dr. David Lubin, formerly of Harvard University, explain themselves in the following manner:

Over the past 10 years, environmental issues have steadily encroached on businesses’ capacity to create value for customers, shareholders, and other stakeholders. Globalized workforces and supply chains have created environmental pressures and attendant business liabilities... “Externalities” such as carbon dioxide emissions and water use are fast becoming material—meaning that investors consider them central to a firm’s performance and stakeholders expect companies to share information about them. (3)

This quote clearly demonstrates that environmental sustainability is becoming a major factor within the business world and certainly has the potential to become as paradigm-altering as globalization. However, the two most important factors described above that are directly related to the profitability of a business are negative externalities, such as carbon dioxide emissions, and their effect on how investors and other stakeholders view businesses. The negative externalities mentioned above can serve as indicators of how seriously and accurately companies have embraced and understood environmental sustainability. Poor

waste management and a significant negative impact on the surrounding environment are indicators that a company has not taken environmental sustainability to heart, and failing to do so is not only harming the surrounding environment, but is also harming its own ability to stay competitive in today's business environment. Additionally, negative externalities affecting the environment are becoming a major concern for investors and informed customers alike. Needless to say, enhancing and maintaining investor and consumer confidence needs to be of the utmost importance to any company.

As shown above, environmental sustainability has rooted itself as a fundamental issue within today's business world. The question of whether companies address it in the correct manner still remains to be answered. According to a survey conducted by MIT in 2011, to which 3,000 executives from the commercial sector spanning 114 different countries responded, 70% of companies have placed sustainability on their management agendas (Haanaes et al. 3). However, the survey indicates that on average, sustainability is ranked only eighth in importance (Haanaes et al. 3). This indicates that while companies are recognizing that sustainability is important, they are still vastly underestimating it. The survey also indicates that two thirds of executives recognize that sustainability is necessary to "being competitive in today's market place" (Haanaes et al. 3). On the other hand, less than one third of companies say that their sustainability initiatives contribute to their profitability (Haanaes et al. 4). This indicates that while a good amount of companies are aware that sustainability can also mean profitability, far less have realized how they can utilize environmentally sustainable tactics effectively enough or on a large enough scale to enhance their profitability. As the data indicates, this is likely due to sustainability not being viewed as a top priority and is being neglected by concerns related to their economic bottom line. This indicates a significant problem in the way companies view sustainability. Companies should not focus on environmental sustainability as a concept that is separate from their economic bottom line as it is just as much of an economic concern if implemented correctly. In accordance with the arguments presented in this research paper, the smart and correct way that companies should define sustainability is: a strategic aspect by which there are both short-term and long-term ways to make money through reduced input costs as well as both simple and more complicated methods of implementation that also lead to reduced input costs as well as other economic gains in the form of increased revenues. Poorly informed companies, conversely, only reluctantly accept it as a necessary concession made to aspects that aren't directly related to its business goals as they are defined today, and treats the relationship between environmental sustainability and the economic bottom line as largely zero-sum. The latter view is incorrect, and the next section of this research paper will provide tactics and strategies for implementing sustainability that will demonstrate that the former view is superior.

### **Suggestions and Strategies for Implementation**

The simplest and most readily available method of achieving sustainability within virtually any company is best introduced by the following facts referenced by Dr. David Bechtold, a professor of strategic management and sustainability at the University of Tampa, during an interview conducted by the author. Studies have shown that for any given product, 98% of the materials used to produce it are thrown away (Bechtold). Furthermore, 96% of the inputs (be they energy or material) used to make a product end up as waste (Janine Benyus). While this may seem like a depressing scenario to any businessperson, one should realize the

tremendous opportunity for savings should any percentage of these inputs be recaptured and reused (Bechtold). The reason why savings within the production process itself are so very valuable comes down to the mathematical nature of savings (Bechtold). Since these savings are bottom line, very little, if anything, gets detracted from it before it gets added to a company's net income. Demonstrably, savings of 1 dollar in your production process is equivalent to a 20 dollar sale, since the average sale has various operating and tax expenses associated with it (Bechtold). Research has also found that savings such as these are easily achieved through rudimentary "housekeeping measures" such as monitoring air conditioning and equipment energy expenditures or even measures as simple as turning off the lights in unoccupied facilities (Bansal and Roth 724). These types of savings are best exemplified by the endeavors of Ray Anderson, former CEO of the carpet tile company Interface Flor and an environmental visionary of sorts, whose innovations are readily accessible to anyone and are definitely achievable by those willing to try. Through taking a closer look at the expenses generated throughout his company's manufacturing processes, he was able to identify and eliminate more obvious forms of wasteful practices and ultimately drove 450 million dollars of savings annually directly to Interface Flor's bottom line (Bechtold). These bottom-line savings were hugely valuable for the company since they were equivalent to roughly 8 billion dollars of sales revenue which would normally have taken Interface Flor 5 years to generate (Bechtold).

Businesses have to redesign their business model around the notion that when they sell products that will serve as long term assets for the purchaser, they are not selling the actual product, but the service that product provides. How this relates to sustainability will soon become apparent. The best way to go about this is to provide long term assets through leasing. While this is done for a myriad of products, the concept is to extend leasing services to products that are not typically leased. This is best exemplified by Ray Anderson's business model for Interface Flor, where he leases carpet to his customers. Typically, when full-room carpeting is replaced, the whole preexisting carpet is removed and disposed of, even if the only parts of the carpets that are worn out are the areas that are exposed to activity. Interface Flor, on the other hand, replaces only the worn out segments of carpet at the request of the customer. In return, the customer pays a monthly fee to Interface Flor in the form of a leasing agreement, instead of just paying a one-time fee for the carpet and its installation. This is very appealing to the customer first and foremost because the monthly fees are much lower and manageable in comparison to the substantial lump-sum charged by other companies. Additionally, the customer never has to worry about their carpet appearing worn-out as it is continuously renewed. Both these aspects have given Interface Flor a significant competitive advantage, as customers are far more interested in leasing carpet in the aforementioned fashion than they are in the old way of investing in carpeting (Bechtold). However, the most important aspect that makes this type of business plan sustainable is that Interface Flor is now willingly and directly responsible for dealing with their used and discarded products. This opens up tremendous opportunity for savings, as the company itself has now recaptured all potential waste generated by their expended product and can now recycle and reuse a significant percentage of their original inputs (Hawken 64). In this way, Interface Flor has created a largely closed production cycle, where their original inputs are recaptured and reused in the production of new products and have in this way reduced their dependence on outside vendors for materials. Ultimately, this concept of leasing long-term assets and focusing on providing a service rather than a product, has allowed the company to repurpose

its waste resulting in massive bottom-line savings. In addition, this process has also indirectly benefited the environment seeing as waste has been recaptured and has now become a resource instead of discarded dead weight that pollutes the environment (Hawken 64). By making the company directly responsible for its own discarded products, waste management is no longer a responsibility on the part of the customers or society, who have little economic incentive to responsibly or efficiently dispose of their waste. Additionally, the entire concept of waste management becomes obsolete, as discarded products are not waste to a company that can reuse materials (Hawken 64). In this way, companies can positively affect the environment by focusing entirely on their own economic bottom line.

While many of these arguments are viable for larger companies, they may not be for smaller companies that don't have the resources to invest in research and development. Concerns such as these can be properly addressed through taking into account the fundamental concept of trickle-down economics. Whilst this concept deals strictly with investments in their monetary form, it applies just as readily to knowledge capital. The large firms have the money and ability to invest in researching sustainable production methods and materials, and have the incentive to do so since they, as industry leaders, set larger goals when it comes to remaining competitive in the big-leagues and thereby need to strive for innovation in the largest sense possible. The investments of the major players will in turn "trickle down" to the small business arena, as large corporations have a significant business incentive to sell their innovatory ideas and technologies as is demonstrated in the following example.

In the days before lead was banned as an anti-corrosive agent used in the manufacturing of various electronic devices, Hewlett Packard developed a new anti-corrosive agent that replaced lead before it was banned, and then sold this concept to a variety of vendors (Nidumolu, Prahalad, and Rangaswami 4). HP profited considerably from this venture, not only because they were able to continue manufacturing without the use of lead, but also because their distribution of knowledge to a variety of vendors led to increased competition, which drove down the price of the new anti-corrosive agent thereby reducing HP's input costs significantly (Nidumolu, Prahalad, and Rangaswami 4). This is a prime example of how the distribution of knowledge capital obtained by an industry leader not only led to a significant profit for the developers when this knowledge capital was initially sold, but also of how it reduced input costs on a long-term basis for an entire industry. Additionally it shows how a single industry leader can bring about massive change within its industry through investment in sustainable business practices.

Not only can industry leaders actively bring about more sustainable business through direct research investments, but they can also indirectly do so by setting sustainability requirements for their vendors to follow. As industry leaders comprise the most significant contracts for their vendors, there's plenty of incentive for these vendors to comply. While a harsher approach would be to respond to non-compliance with these requirements by declining to enter into further contracts with the offending parties, there are more relationship-fostering approaches to be considered. The most straightforward example of such an approach would be to offer more lucrative contracts to vendors who best meet the assigned requirements. Such a method would lead to healthy competition among vendors, and the market would root out the inefficient and ineffective alternatives. Increased competition also leads to decreased costs on the part of the consumer (meaning the requirement-setting company as well as other

companies within the same sector), which would further serve to prove the viability and lucrativeness of this methodology. Industry leaders such as Walmart, Unilever, and Staples have already issued requirements to their vendors (Nidumolu, Prahalad, and Rangaswami 5). Unilever has taken a stricter approach to these requirements by announcing that it will only buy from sustainable vendors and sources by 2015 (Nidumolu, Prahalad, and Rangaswami 5). Staples has taken a more competition friendly approach, as they have announced that they will prioritize business with sustainable vendors, and implement a phased approach where change is achieved through a gradual process of co-operation with their vendors (Staples). Walmart has taken a similar approach, stating that by 2017 it will buy 70% of its products from vendors practicing environmentally sustainable business (Walmart).

### **Misconceptions and Misrepresentations of Environmental Sustainability**

How the business world views sustainability is the fundamental determinant of whether companies will be able to implement it successfully enough to enjoy the significant monetary value that it is so very capable of adding to a company's economic bottom line. As there are a plethora of misconceptions and misguided arguments regarding sustainability out there, it becomes important to address these misconceptions in order to alleviate some of the confusion surrounding this topic.

The concept of environmental sustainability has been linked to what has become known as the triple bottom line (or TBL). The concept of the TBL stipulates that the goals of businesses are no longer as single-minded as to focus only on financial responsibilities, but instead are equally focused on social and environmental responsibilities (Hudson and Rogers 4). This concept, while both noble and arguably prudent, creates much confusion within the business world and prevents many from realizing that environmental responsibility should not only be viewed as an additional concern that businesses now have to worry about. By presenting environmental sustainability as a responsibility (and a rather heavy one at that), it causes businesses to only meet the minimum requirements set by the regulatory environment (Bansal and Roth 7). This is only natural, seeing as no business advantages are readily observed when sustainability is introduced as entirely separate from the economic bottom line. Instead sustainability should be viewed as an opportunity that greatly aids a business' efforts in achieving the goals of the original economic bottom line. Terms such as environmental profitability should replace terms like environmental responsibility and environmental protection in order to more effectively reflect the profit-building potential of such practices. The terminology and definitions used to introduce environmental sustainability are imperative in combating the vast misconceptions attributed to sustainability in today's business world. Introducing a concept poorly leads to the proverbial "poisoning of the well" concept, which is a very likely cause of the widespread confusion surrounding sustainability.

As mentioned earlier in this section, many misconceptions cloud the perceptions of companies and prevent them from realizing the true nature of sustainability and the opportunities it creates. As a result, a multitude of companies are intent on believing that becoming eco-friendly will have the opposite effect on their profitability, and believe that it will dampen their ability to remain competitive (Nidumolu, Prahalad, and Rangaswami 3). In fact, most CEOs in Europe and the United States recognize environmental sustainability only

as a corporate social responsibility completely separate from other fundamental objectives of a business, and thereby fail to recognize its concrete applicability to the realms of cutting costs, enhancing competitiveness, and enhancing the overall profitability of a business (Nidumolu, Prahalad, and Rangaswami 3). They voice concerns such as a supposed lack in immediate financial benefits, customer's unwillingness to pay a price premium for green products during a recession, increased investment costs for new equipment and production processes among many other concerns; concerns that according to researchers Nidumolu, Prahalad, and Rangaswami are entirely unfounded. They write that after a long-term study of 30 large corporations, environmental sustainability proved to be a "mother lode of organizational and technological innovations that yielded both bottom-line and top-line returns" (Nidumolu, Prahalad, and Rangaswami 3). They continue to reaffirm the fact that environmentally sustainable business practices help to lower costs through reducing inputs and increase revenues through the creation of better products (Nidumolu, Prahalad, and Rangaswami 3).

Furthermore, many misconceptions are focused on the ability of companies to reuse and recycle waste in a profitable manner which is the determining factor of whether or not a company is able to create a closed production cycle. Many argue that certain industries simply can't recycle their waste profitably, and that investment costs drastically outweigh potential savings. These critics of "green" or sustainable production methods often point out that the "ecology/economy trade-off" is often too steep within certain industrial sectors, and that recapturing and repurposing waste would prove very costly indeed (Hudson and Rogers 5). However, a study conducted within the industrial chemical sector, where the aforementioned trade-offs are viewed to be particularly steep and waste is supposedly too cumbersome (not to mention highly toxic) to recapture and recycle, found that sustainable production methods based on various methods of reducing waste emissions and recapturing various chemical by-products during the production process increased chemical yields (Porter and van der Linde 103). The study surveyed 29 chemical plants and looked into their efforts to offset waste generation (Hudson and Rogers 5). It found that of the 181 different waste reduction and recapturing processes "only one resulted in a net cost increase" (Hudson and Rogers 5). In fact, for the 27 processes that had sufficient accompanying financial data to allow for savings calculations, for every dollar invested in the sustainable production processes the return in the form of savings was 3.49 dollars (Hudson and Rogers 5). In other words, companies more than tripled their money spent on investments.

Additional criticism of investments in sustainable production methods centers on the notion that these investments are very long-term and companies won't see returns quickly enough to be able to justify them to shareholders (CSR Pays). However, continuing with the study on the industrial chemical sector introduced in the previous paragraph, it is clear that even in a sector viewed as largely incompatible with sustainable production methods that yield profits, returns can be seen far sooner than expected. Of the 38 above-mentioned sustainability initiatives that provided detailed data on payback periods, two thirds covered their initial investment costs in six months or less (Hudson and Rogers 5). Thus, it stands to reason that had any of these initiatives been implemented near the beginning of the corresponding fiscal year, share-holders would have seen returns above and beyond the initial investments by the end of the fiscal year.

## Conclusion

Environmental sustainability is a concept which is responsible for a major shift in the way businesses approach and interact with the environment. This change in approach is defined by smart and well-informed businesses as an economic concern that will greatly benefit their economic bottom line and is no way a separate concern that is detrimental to their economic bottom line. As such, environmental sustainability has been appropriately referred to as the new innovational frontier within the world of business and has been linked to an enormous potential for enhancing competitive advantage. Therefore, businesses that do not approach it with the correct mindset will lose out on a great deal of this competitive advantage and will quickly fall behind those companies that are well-informed and pro-active. Top management of companies that hope to harness the great potential for economic gain that environmental sustainability promises need to institute voluntary business initiatives that continuously strive to make their companies more competitive through deep introspection and persistent innovation. Companies that pursue the goal of environmental sustainability in the aforementioned manner can significantly reduce their input costs, increase their revenues, create largely closed production cycles, expand into new markets and drive massive economic gain to their bottom lines. Thus, the evidence presented in this research paper strongly suggests that companies simply cannot afford to undervalue and deprioritize environmental sustainability any longer.

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