

SOCIOECONOMIC IMPLICATIONS FOR SUSTAINABLE BUSINESS

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Abstract

The analysis focuses on the importance of developing and applying a comprehensive and systematic set of sustainability measures in business enterprises. It suggests that the adoption of such measures is cost-neutral and can become a source of competitive advantage for companies, operating in various economic sectors. This can lead to the creation of value through the introduction of clean technologies while at the same time minimizing the expenses. In addition to providing competitive advantage, sustainability measures could benefit workers, communities and indigenous cultures.

Key words: sustainability, cost effectiveness, profitability, clean technologies

1. INTRODUCTION

The process of adding value in business enterprises is of primary importance when a company is pursuing the objective to raise its profitability levels. However, in many cases sustainability measures are considered expensive and inadequate in the process of adding value. Most companies direct their environmental capital expenditures toward end-of-pipe pollution controls or clean-up technologies. End-of-pipe technologies do not change the processes or products that cause environmental impacts, hence the costs of these technologies accrue to the already existing cost of doing business and therefore seem expensive. This is the reason for a number of non-sustainable enterprises to consider environmental management as a cost increasing method and often minimize the expenses to comply with regulations (Doppelt, 2010).

This paper focuses on the importance of developing and applying a comprehensive and systematic set of sustainability measures in business enterprises. It suggests that the adoption of such measures is cost-neutral and can become a source of competitive advantage for companies, operating in various economic sectors. Eventually, the process can lead to the creation of value through the introduction of clean technologies, while at the same time minimizing the expenses. The model proposes a balanced approach of economic benefits and cost effectiveness, which contributes to the increase in profitability levels of individual business operations and ultimately to the achievement of positive local impact. In addition to providing competitive advantage, sustainability measures could benefit workers, communities and indigenous cultures. Furthermore, the paper suggests that sustainable production methods can create new industries and jobs.

Part 2 of the paper provides an overview of the impact sustainability measures have on the cost levels in large corporations as well as in small and medium enterprises. Part 3 is focused on the role of sustainability measures in overcoming potential risk factors for business operations. Part 4 provides an overview of the employee benefits achieved through implementing sustainability measures, and Part 5 speculates on the improvement in business performance of sustainable enterprises. Part 6 summarizes and concludes.

2. COST SAVING THROUGH SUSTAINABILITY MEASURES

Not only large corporations can save money through the adoption of sustainability measures, but also small and medium enterprises can also benefit from their introduction in the production process. An analysis of firms in industries with substantial emissions were tested to see if a correlation existed between their environmental efficiency, measured as emissions per unit of production, and their financial performance, measured as returns on sales, assets, and equity. The authors concluded that

firms that reduced emissions tended to exhibit improved financial performance in subsequent years (Heart and Ahuja 1996).

An analysis of 243 firms conducted statistical tests to see if there was a significant relationship between their financial performance, measured as return on assets, and their environmental performance and their ratings by an independent organization, covering levels of emissions, rates of reduction of wastes and emissions, compliance with environmental regulations, environmental liabilities, and adoption of technologies and systems to prevent pollution. The authors concluded that financial returns were positively correlated with environmental ratings. Contrary to the mistaken belief that environmentally responsible practices represent costs without benefits they claim that the computations clearly demonstrate that good environmental citizenship is great for the bottom line (Russo and Fouts 1997).

Another analysis of 89 multinational corporations (MNCs), based in the US, examined the extent to which they benefited during the period 1994-1997, taking advantage of lax environmental standards in developing countries. The conclusion reached by the authors is that higher market values were enjoyed by the firms that applied to all operations a single, environmental standard that was higher than the one in the developing countries (Dowell et al. 2000).

On a higher level, portfolio studies step back from the characteristics of individual firms and compare the financial performance of green portfolios against the performance of those that reflect the market as a whole. Goodman et al. (2002) list studies that have made the comparisons looking at different industries, time periods, determinants of which firms are included in green portfolios as well as indicators of financial performance. Three of the most prominent studies produced these key findings:

- No significant cost to social and environmental screening occurred, even when controlling for beta (risk), dividend yield, growth, and corporation size. Because the authors ran the environmental data separately, the results also show in particular that there is no significant cost to screening out just the worst environmental actors in a large portfolio of stocks (Stone et al. 2010);
- Investors who choose the environmental leaders in an industry-balance portfolio were found to do even sometimes better than those choosing the environmental laggards in each industry (Cohen et al. 1995). ;
- Equity portfolios, which are composed of stocks with good environmental ratings are likely to outperform the stock market while controlling for some macroeconomic trends (Blank and Carty 2002).

These and similar studies clearly counter the common belief that firms' financial performance must suffer if they take actions to reduce their environmental impacts. They demonstrate that firms with good environmental management often do better than firms with poor management of the resources. Also, the portfolio studies indicate that investors can have considerable confidence that well-managed portfolios, favoring firms with environmental leadership, not only will never underperform the rest of the market but have all the potential to even outperform it. Clearly, sustainability measures which are adopted through a prudent and efficiency-based process may either be cost-neutral or even more so – they can reduce costs and turn out to be a major source of value for the enterprises and their production process (Doppelt 2010).

3. RISK AVOIDANCE THROUGH SUSTAINABILITY MEASURES

Environmental and social liabilities can reduce shareholder value, while sustainability measures can cut costs and increase value. Therefore, the introduction of sustainability measures in the production process should also be considered as a valuable approach towards risk avoidance.

Many companies have realized that the way business is conducted has changed dramatically. For local companies, where the government owns the means of production, very few regulations can be implemented. But the MNCs are dependent on development banks which regulate businesses. A

project has to look sound even when a company owns a very small part of it, because the company's name is associated with it. Therefore, it is subject to environmental impact assessment (EIA). Even if these corporations are not delighted about spending money on environmental upkeep, they realize that not doing so will hurt their business in other areas (Rogers et al. 2010).

Environmental liabilities such as climate change, emissions, and contaminated resources are bottom-line issues for companies and investors. According to Doppelt (2010) it is neither prudent nor responsible for corporate directors, CEOs and others with fiduciary responsibilities to ignore potential environmental liabilities or to neglect steps to reduce company exposure to these risks. The more the directors and CEOs fail to assess, report and proactively address environmental and social risks, the greater the potential for shareholder suits over breach of fiduciary duty. Therefore, shareholder value can decrease due to three factors: violations of environmental laws, lack of preparation for environmental regulations, and inadequate disclosure of environmental liabilities.

Each one of these factors can be supported by examples, which provide a comprehensive understanding of their general impact.

Shareholder value can decrease due to violations of environmental laws:

For example, over the last three years the Chinese government has punished 33 MNCs violating the nation's environmental laws and regulations. The exposed companies include subsidiaries of world renowned corporations such as American Standard, Panasonic, Pepsi, Nestle, and 3M. They were punished mainly for discharges of substandard waste water and for unauthorized construction activities that occurred in the absence of proper environmental impact assessments. The enterprises have been talking about corporate responsibility, yet they could not even abide by the law. On the one hand, MNCs have not complied with global uniform standards; on the other hand they have made very weak implementation of environmental laws and regulations in China.¹

Shareholder value can decrease due to lack of preparation for environmental regulations:

Organizations must constantly be aware of and plan for new regulations. Companies with forward looking environmental management programs often save money and generate competitive advantage by being prepared to meet or exceed new regulations. Hence, shareholder value can be reduced in companies that fail to forecast and proactively plan for environmental regulations. It is certainly not easy for companies to keep a proper green profile. However, along with the failures, there have been a number of successful cases reported of project that benefit the environment and create financial value. For example, 3M's "Pollution Prevention Pays" program in which a group of over 3 000 mainly employee generated projects have reduced 3M's emissions by over 1 billion pounds since 1975, while saving the company approximately \$500 million (Walley & Whitehead 1994).

Shareholder value can be reduced due to inadequate disclosure of environmental liabilities:

In cases when companies understate or fail to acknowledge environmental liabilities, investors consider it difficult to assess future increase in profitability and shareholder value. In such cases costs can drive down corporate value and reduce investors' trust, thus making it difficult to attract capital. Gamble et al. (1995) point out that in 1990 a US opinion poll reported that most people feel that the environment is so important that requirements and standards cannot be too high and continuing environmental improvements must be made regardless of costs. The results of the opinion polls suggest that shareholders are concerned with the way in which corporate entities are responding to environmental concerns.

¹ Multinational Corporations Violating China's Environmental Law, <http://www.worldwatch.org> (accessed on 20 July, 2015)

4. EMPLOYEE BENEFITS THROUGH SUSTAINABILITY MEASURES

Apart from providing competitive advantage, the introduction of sustainability measures in the production process contributes to the increase in employee benefits as well as to the overall community welfare and the benefit of indigenous cultures.

A report (ECONorthwest 2001) suggests that sustainable practices in the workplace can improve the health and productivity of workers directly, by making the worksite a healthier and better place to work and indirectly making the larger community a healthier place to live. Eliminating the use of toxic materials can cut costs of handling the substances and reduce illness and lost time from work that results from workers being exposed to them. Increased health and productivity can also occur by making worksites healthier and more pleasant places to work. Efficient lightning can help people's vision, which reduces mistakes, increases work quality and boosts production. Optimal heating and cooling systems can increase workers' comfort and output. Improvements in health and productivity are especially important to individuals who have health problems or who have such low earnings that they cannot afford illness related absences from work. Thus, these benefits are especially important to low-income and economically and socially distressed rural communities, urban neighborhoods, and indigenous cultures.

The adoption of sustainability measures provides *three options* to solve work related problems and increase employee benefits (Doppelt 2010):

First, paying equitable living wages, providing good working conditions, abiding by fair trade agreements and adopting other environmental and human rights practices can improve the living conditions and incomes of workers in developing nations. This approach will also ensure that businesses in the West and their contractors in developing nations become positive influences on local economies and communities rather than harming livelihoods and indigenous cultures.

Second, reducing the use of natural resources, energy and toxic materials, and the production of waste provides a new and very promising way to cut operating costs. The adoption of sustainability measures allows companies to reduce costs by dramatically increasing their environmental productivity.

Third, the adoption of sustainability measures can generate new products and even whole new industries. Companies that introduce innovative sustainable products into the marketplace will compete in markets uncrowded with competitors.

In addition to protecting workers and increasing employee benefits, Doppelt (2010) claims that sustainable production methods can create jobs in various industries, occupations, and locations. Some of these industries creating jobs are:

- Fitting buildings with energy efficient technologies;
- Producing biofuels such as ethanol from agricultural waste;
- Redesigning urban neighborhoods to absorb and treat storm water locally;
- Offering services to support products rather than just selling products, such as car sharing business, floor coverings and copy equipment leasing;
- Production of environmentally certified food, forest and fisheries products;
- Paving roads and driveways with pervious, non-toxic road materials;
- Designing, building, and operating wind-powered electricity generators;
- Producing construction materials from plant materials;
- Implementing pest control systems that use organic approaches rather than relying solely on synthetic pesticides;
- Manufacturing products from recycled by-products and waste from other processes and products;
- Deconstruction of old buildings to reuse raw materials;

- Designing and constructing “green buildings”, particularly with regard to efficient energy and water supply;
- Manufacturing of photovoltaic and hydrogen fuel-cell device;
- Designing, installing, and maintaining water conservation systems for farms and urban landscapes;
- Remanufacturing worn products, such as toner cartridges for copiers and appliance remanufacturing

Evidently, the key words here are *recycling, reusing and remanufacturing*. Each one of them describes a process of repeated usage of materials in the normal business operation cycles, which close the loop of the business cycles by using the waste (by-products) as raw materials for the next cycle or a completely different type of business. Engaging employees in such processes not only improves their performance and contribution to the achievement of the sustainability goals of a company, but also improves the financial performance of a particular business undertaking or related businesses in terms of cost reduction and optimization of profit levels.

5. IMPROVEMENT IN BUSINESS PERFORMANCE THROUGH SUSTAINABILITY MEASURES

Organizations are complex social systems. Just as every organ of the human body is inextricably connected to every other, the core processes, units, values, norms, behavior and individuals of an organization affect and are affected by every other. It is impossible in most organizations to change one core element without generating ripple effects throughout many, perhaps even all of the others. *The key point is that the performance of an organization is the product of the interaction of its parts* (Ackoff 1999).

Systems can be defined by *five key traits* (Kim 1999; Anderson and Johnson 1997):

- *Systems have specific purposes.* Every system has a central purpose that defines it as a discrete entity in relationship to the larger system in which it operates. For example, the purpose of a private company is to generate and distribute specific goods and services. The purpose of a government is also, in part, to provide goods (e.g. drinking and irrigation water, power) and services (e.g. education, public safety) that the electorate have deemed important. The purpose of a system is defined by the system as a whole, not by any one of its parts. For example, the wings, engines, or any other part alone cannot accomplish the purpose of an aircraft.
- *Systems must have all of their parts present to achieve their purpose.* If key pieces of a system can be removed without undermining its overall functioning, the pieces are part of a collection, not a system. For example, the wings, engines, electronics and fuel of an aircraft are all essential for flight. Leave out just one of these and the plane won't fly.
- *The way the parts of a system are arranged determines its performance.* If the parts of something can be arranged in any arbitrary order, they are a collection, not a system. There is no real need for the silverware in the drawer to be stacked in a particular order (unless you prefer it that way). In contrast, the way the parts of a system are arranged determines if and how it can achieve its purpose. Unless the core parts of an aircraft are arranged in a specific order, it cannot fly. All of the systems (units) of an organization must fulfil their roles effectively and efficiently for it to achieve optimal performance.
- *Each of the core elements of a system is dependent on the other core elements.* It follows from the above that the core components of a system form an interlinked set. For example, the way the lungs perform depends on the way the heart, bloodstream, brain and other elements are performing. The effect of the marketing and sales departments in an organization depends on the performance of the R&D, purchasing production and transportation units. In essence, the interactions among the parts are controlled by rules that define how the system operates.

- *Systems seek to maintain stability through feedback.* Left on its own, a system will seek to maintain equilibrium (the status quo) by retrieving and incorporating information from the external environment that allows it to make adjustments aimed at achieving its purpose. The human body, for example, has all sorts of mechanisms. Jogging increases the heart rate and raises body temperatures beyond the normal 36.6°C. Overheating triggers the body's feedback system, causing the sweat glands to produce perspiration long enough to cool the system down to the normal temperature. Information on sales and market demand provides critical feedback to the production systems of an organization about the quantity and type of products to produce. Without this feedback, the company may over- or under- produce, or manufacture poor-quality products, and thus lose customers, money, or both.

The coordinated implementation of these five traits in business operations guarantees a successful performance and achievement of the organization's objectives. In combination with a proper set of sustainability measurers, which improve the environmental impact and the employees' benefits, they can boost up the economic performance of the enterprise and improve the impact which the business has on the local community.

6. CONCLUSION

This paper suggested that the introduction of sustainability measures in various businesses can ultimately contribute to cost reduction and increased profitability, risk avoidance and improvement of employee benefits, as well as the benefits of communities and indigenous cultures. It suggested that the adoption of such measures is cost-neutral and can become a source of competitive advantage for companies, operating in various economic sectors. Thus the process lead to the creation of value through a balanced approach of economic benefits and cost effectiveness, which contributes to the increase in profitability levels of individual business operations and ultimately to the achievement of positive local impact.

In addition to their cost saving and risk avoidance function, sustainability measures could benefit workers, communities and indigenous cultures. They can create new industries and jobs and also improve the proper functioning of the systems in business operations.

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