ECONOMIC SUSTAINABILITY: CONCEPTS AND INDICATORS

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Abstract

When confronting fundamental challenges such as climate change, population growth, human rights and resource constraints – businesses and public sector organizations face a daunting new imperative. It is an axiom of current business thought and practice in most Western European enterprises that they must use fewer resources to produce their goods and services – a responsible use of those resources that benefit society and the environment and still meet their traditional demands: from customers and citizens for price, quality and availability; from shareholders for outstanding performance and returns; and from politicians for economic growth and prosperity in both developed and developing economies.

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The imperative for sustainable production and consumption builds on the principles of reduce, reuse and recycle, but it requires much more than that. It requires innovative thinking and fundamental alterations in business models. It requires making the most of fast-changing regulations, leading-edge technologies and shifting consumer expectations and demands. Above all, this new imperative requires that sustainability be woven into the core strategies of companies and public sector organizations.

As sustainability moves from the periphery to the heart of business and the public sector, organizations are finding that it comes with a price and a prize.

- The **price** is the fundamental transformation that fully integrated sustainability requires in the face of an aggressive social, environmental and economic agenda.
- The **prize**, however, is tantalizing: the opportunity for organizations to outperform their peers and achieve high performance.

So what are top executives to do? I believe opportunities abound to both preserve and create value by integrating sustainability into business strategy and operating models.

- New and differentiated products and services can increase revenue and generate market-leading innovations and technologies for a renewed path to profitable growth.
- Higher resource efficiency and lower emissions can reduce cost.
- Proactive responses can better manage regulatory and operational risk.

Together these opportunities also can build the intangible – and invaluable – assets of brand and reputation.

So how can sustainability be defined in terms related to this article? Sustainability affects all industries and governments. Issues encompass an integrated agenda of environmental, social and economic impact – sometimes referred to as "planet, people and profit." In this context I define sustainability as the way a company or organization creates value for its shareholders and society by maximizing the positive and minimizing the negative effects on social, environmental and economic issues and stakeholders to:

- grow revenue;
- reduce cost;
- manage risk and;
- build intangible assets.

1. ***The Drivers of change***

So, what are the drivers for the necessary change? The challenge is getting from here to there and delivering the benefits. In a rapidly changing business context, gaining competitive advantage can be daunting. I believe there are **six key drivers of change** on which executives should begin acting now.

1.1. **Changing Supply**

1.1.1. *Natural resources*

Robust economic growth in emerging economies, combined with the high requirements of Western economies, has caused fierce competition for natural resources, particularly energy and water. It also has increased carbon dioxide (CO2) emissions, which contribute to global climate change. The UN Framework Convention on Climate Change estimates that the private sector will need to invest more than 400 billion Euros every year through to 2030 to stabilize CO2 emissions. The **price is huge, but so is the prize**. Dealing with climate change can galvanize an extraordinary wave of technology, service and business model innovation and drive coordinated global action on a scale not seen before. The level of venture capital investment in clean and "green" technologies is already significant, on a par with the early phases of the dot-com boom. Cleantech investments in the United States rocketed from US$500 million in 2005 to more than US$4 billion in 2007. European growth is slower but still significant, more than doubling to US$1 billion in the same period.

1.1.2. *Employees*

In the face of an aging workforce and global competition for talent, organizations that take sustainability seriously are well positioned to attract and retain the most qualified employees, studies indicate. In developing countries, companies that offer above-average working conditions and health care benefits can have an easier time finding skilled employees in areas with limited educational systems. But benefits for companies go beyond employment. As a number of global human resources executives have commented, leadership and performance on sustainability also can directly contribute to productivity and to customer sales and satisfaction by increasing employees' motivation and commitment and their propensity to go beyond what is expected of them.

1.1.3. *Capital markets*

Investors have begun to consider sustainability performance as an indicator of business performance – and a new lens through which to scrutinize the quality of management. Banks and pension funds are starting to view the longevity of a business and its environmental, social and governance impact as part of their financial rating process. Increasingly they are willing to praise – and punish – sustainability performance. JPMorgan, Citigroup and Morgan Stanley have developed lending guidelines that make it tougher for investor-owned utilities to build coal-fired power plants because of the risks associated with CO2 emissions. We also see significant growth in sustainability reports and indexes from leading global financial institutions like Goldman Sachs, Lehman Brothers and Morgan Stanley, which weigh the impact on valuation and investment decisions.

1.2. **Changing demand**

1.2.1. *Consumers as citizens*

Changing consumer expectations and behavior have a material impact on value creation, profitability and growth. Nine out of 10 consumers around the world say they are ready to switch to energy providers offering products and services that help reduce carbon emissions – and two-thirds are willing to pay on average11 percent more for the privilege. Consumers read labels more avidly than ever, scrutinizing not just a product's content but also the process required to put it in their hands. They pay more attention to ethical and environmental concerns, including the use of child labor, the procurement of conflict diamonds, the spread of HIV/AIDS, human rights abuses and the rising amount of non-recyclable waste. Sustaining high performance means meeting these rising consumer expectations and competing for trust to secure growth, reputation and brand strength. In the area of climate change, this is no small task. Consumers have little faith in government and business to advise them on ways to address climate change. Asked who they most trust, 43 percent of consumers "always" believe academics and nongovernmental organizations (NGOs) and 37 percent believe consumer associations, but less than 15 percent believe governments and energy companies.

Nonetheless, 18 percent of consumers believe that the responsibility for tackling climate change lies primarily with government and business.

1.2.2. *Stakeholder influence*

Businesses and public sector organizations must answer to an expanding group of stakeholders, including NGOs, the media, academia, and influential individuals and celebrities. All of them have fresh demands and increasing power to threaten a company's commercial viability. Their perception is your reality, regardless of the facts. Social capital can determine a company's license to operate. Companies today must take responsibility for both the social and environmental impact of their operations or leave themselves open to retrospective legislation and stakeholder backlash in the future. If you want to do business in Africa, you must contend with HIV/AIDS and its effect on the health of your workforce and the communities in which you operate. If you want to establish a presence in a developing country but do not have on-the-ground connections to local people, your chances for success are diminished.

However, companies' reactions to stakeholder pressure can demonstrate leadership in sustainability. Global Witness lobbied De Beers to stop trading in conflict diamonds in 1998; today the company leads advocates of the Kimberley Process Certification Scheme to ensure that rough diamonds are conflict-free. Nike suffered consumer boycotts in the 1990s over the use of child labor in its contractors' sweatshops; today the company is viewed as a sector role model for human rights policies because it implemented changes.

1.3. **Changing rules of the game**

National or global regulation on sustainability creates winners and losers. While it can disrupt and even destroy existing business models and industry structures, it also can create a positive platform for change by reducing business uncertainty and creating new market opportunities. In the area of climate change, four out of five business leaders want governments to take a central role in tackling the issue. They feel this way even though there is no agreement over how best to standardize requirements across countries and incentivise businesses and consumers to change their behaviour. Proactively partnering with policy-makers, stakeholders and even industry rivals in shaping regulation and policy solutions that benefit business and society makes sense in managing healthy competition. Increasingly this will be a feature of smart strategy.

1.4. **Difficult trade-offs**

In the face of these changes and pressures, organisations must grapple with difficult trade-offs and major changes to business models.

Electric Utility Companies, for example, must meet ever-increasing demand and still find ways to reduce emissions from generating electricity. The industry is responding not only with investments in renewable energy and clean-coal technology but also with new business models that make energy demand management a core component of the business and a competitive advantage. Companies in extractive industries still need to grow despite scarce resources, so they are moving deeper into remote locations and frontier geographies where they are unaccustomed to operating. These moves demand new levels of corporate responsibility – since their revenues can equal the entire gross domestic product of the host country – as well as higher costs.

When BP led several consortia of petroleum companies to develop oil and gas fields in Azerbaijan, Georgia and Turkey, the company opened an Enterprise Center in Baku to help develop an effective local supplier base and strengthen the Azerbaijani economy.

The center, run on behalf of BP's international oil and gas partners in the Caspian region, offers training in management, finance, IT, quality control and marketing. Experts also provide technological assistance to improve engineering and manufacturing know-how.

BP's local supplier development program benefits BP and local Azerbaijani firms alike. More competitive local firms offer BP a greater choice of cost-effective suppliers. Building local skills encourages improved business practices, staff development, technology investments and better safety performance.

1.5. **Complex conditions**

Facing sustainability challenges isn't easy. It is important not to make the wrong choice of policies and technologies. Early regulation, for example, can unexpectedly handicap business for the longer term. Germany decided in the late 1990s to close all its nuclear power reactors by 2020. As a result, renewable energies grew too slowly, and the carbon footprint of German electricity remains very high. Meanwhile, numerous other countries today are considering major investments or reinvestments in nuclear facilities to reduce their carbon emissions. It is also important to understand the full impact of sustainability up and down the supply chain and the expected extent of responsibility now and in the future. Timberland was surprised to discover that its major carbon impact occurred before the company even got involved in the making of shoes. It was the manufacture of the raw materials, not the manufacture and transportation of the final product that caused the greatest impact. To understand the full vulnerability – and opportunity – that supply chains represent, companies must develop new relationships with their suppliers to influence them effectively.

For their part, suppliers can gain first-mover advantage in some cases by making the shift to more sustainable production and influencing their customers. Integrating sustainability into business strategies is further complicated by the speed, intensity and aggressiveness of globalization, which many business leaders still struggle to address or even understand. Fast-moving globalization is one reason execution is especially difficult in global organizations with critical global processes and complex operating models and organization structures. Add to the mix the unprecedented change and complexity that organizations face with the advent of the multi-polar world – a world characterized by multiple centres of economic power and activity. Established global companies now compete with emerging-market multinationals for natural resources, capital and talent as well as for consumers and innovations. In the future, they might also contend with hybrid organizations such as public-private partnerships or social enterprises, which operate as for-profit businesses with social or environmental missions. In the face of such sweeping changes, little wonder that senior executives say their biggest challenge is shifting from strategy to execution.

1.6. **Seizing competitive advantage**

Despite the complexity of the issues, sustainability can create substantial value and innovation – a point validated by the world's largest research study to date on corporate responsibility.**(7)** Companies with the highest levels of social performance view social and environmental challenges as drivers to innovate and unlock new opportunities. The study also found that businesses excelling in their approach to corporate responsibility tend to be those that integrate the principles of sustainability into both their everyday business processes and their strategic decision making. Leading companies already are demonstrating how integrating sustainability into their business helps them achieve high performance. UK Supermarket giant, Tesco measures 60,000 suppliers on their ability to develop environmentally friendly packaging and conserve natural resources. Local products are sourced in every UK region to reduce "food miles", save transportation costs and increase product freshness. The company projects that reducing product and logistics packaging by just 5 percent will yield a savings in its supply chain of £5 billion by 2013, including £1.4 billion flowing directly to Tesco. Sustainability labelling is also emerging as an opportunity for companies to differentiate and grow market share.

Fair-trade is a fast-growing, multi-billion Euro annual global markets for coffee, chocolate and other agricultural commodities. In the United Kingdom – where Fair-trade is already estimated to be worth £400 million in 2007, up from £290 million in 2006 – significant competition is emerging among retailers and consumer goods companies. Tesco already stocks more than 140 Fair-trade products. Tate & Lyle intends to move its entire line of retail cane sugars to Fair-trade by 2010, the largest switch to Fair-trade by any major UK food or drink brand.

2. ***Strategic options***

Organisations that effectively weave sustainability into the fabric of their core strategy and operating model can drive new capabilities and innovation with far-reaching effects in four areas:

- revenue growth from new or differentiated products and services;
- cost reduction and efficiency improvements;
- better risk management;
- brand and reputation enhancement.

To achieve these benefits, it is important to prioritize and leverage core strengths and opportunities in the short term and execute accordingly. Businesses generally employ four types of competitive strategies.

- **Go it alone.** Some companies differentiate based on sustainability by virtue of having a first-mover advantage and a clear way to profit from a new market segment or consumer preferences. Philips invested 400 million Euros in "green" lighting technologies from 2001 to 2005. By 2006, the company's total portfolio of "green" products had grown to 4 billion Euros, accounting for 15 percent of its total turnover.
- **Collaborate in partnerships and clusters.** Other organizations partner with NGOs, development agencies or across their value chain with suppliers, distributors and new business partners to develop new technologies and solutions or win stakeholder and consumer trust. Lafarge, the French cement and building materials producer has a long-standing partnership with the World Wildlife Fund to better understand and manage its environmental impact. Demonstrating credible performance makes it easier for the company to secure access to land and resources. UK retailer Marks & Spencer works with supply chain partner MAS Holdings in Sri Lanka on a broad range of sustainability initiatives, from sharing best practices and co-investment in environmental management systems to a "Go Beyond" label that supports women's issues and diversity. Joint efforts like these play an important part in raising performance and underpinning credibility in the battle for consumer trust.
- **Collaborate at an industry level.** Leading players in an industry can voluntarily band together to regulate themselves, setting and agreeing on voluntary codes of conduct. This is critical where there is a first-mover disadvantage or collective action problem and little chance of formal regulation. The long-standing Forest Stewardship Council, set up to avoid unsustainable forestry, is an example. Begun in partnership with leading NGOs and UK retailer B&Q, it now includes many leading industry players worldwide.
- **Shape regulation and policy.** Companies can proactively engage in efforts to shape regulation that benefits business and society, particularly when they are well placed to take advantage of new markets. Alcoa, DuPont, Duke Energy, GE and others have teamed with Climate Action Partnership to lead lobbying to limit carbon emissions and introduce cap and trade mechanisms at the regional and National levels.
- **Combine options.** None of these strategies are mutually exclusive. Companies often implement more than one at the same time. GE is going it alone to develop its Ecomagination suite of "green" industrial products while it actively works to shape regulation for its future markets. To make the right choices, organizations considering their options should ask themselves the following questions:

➢ Is there a first-mover advantage or disadvantage?

➢ What is the chance for formal regulation and policy support? How can we attempt to influence and shape it?

➢ Do we have the capabilities ourselves to succeed?

➢ Who are the right partners, and what are the most effective forms of collaboration?

3. ***Adopting an Integrated Approach***

It is also critical to take an integrated approach to action. Organizations that create value from sustainability exhibit two features:

- Sustained and public leadership commitment – absolutely necessary for symbolic, financial and motivational reasons.
- An integrated framework across their organization and value chain.

True integration is essential, as opposed to random, isolated efforts with narrow impact and little measurement. Integrated sustainability means:

- Integrated into core business strategies based on a rich understanding of industry trends, with execution based on deep industry insights.
- Integrated across environmental, social and economic issues.
- Integrated and aligned across business segments.
- Integrated into strategy and execution across the value chain from design to operation
- Integrated into performance management measures so sustainability indicators can help manage stakeholder expectations and deliver both direct and indirect business benefits.

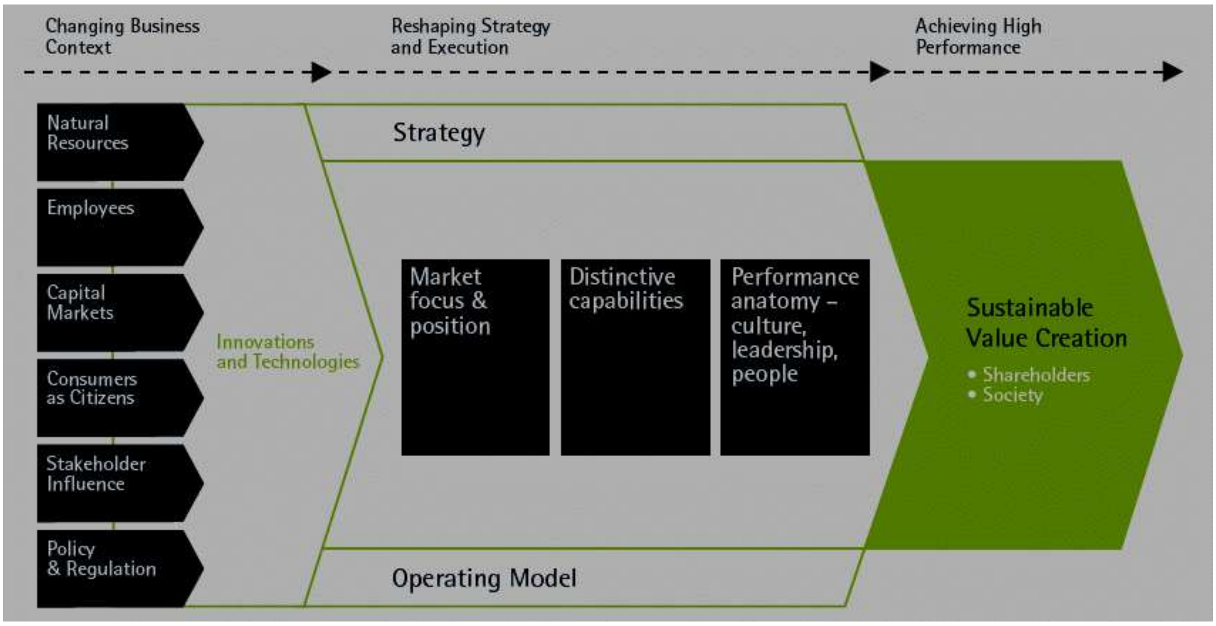
To achieve sustainable value creation for shareholders and society, sustainability must be integrated throughout an organization's strategy and operating model, and the enabling effects of innovations and technologies. True integration will require new tools, technologies, processes and metrics, as well as changes in human behaviour, to align strategy and operations.

4. ***Integrating sustainability throughout an organization***

Sustainability is an engine to drive high-performance businesses and public sector organizations by:

- Focusing on business imperatives – growing new business, optimising assets and protecting long-term business value.
- Creating value through appropriate levers; emissions reduction, materials safety, waste reduction, land sustainability, water use optimisation, energy reduction and social value
- Applying levers to core business areas – value chain, products and services, physical assets, operational execution and stakeholder influence.
- Guiding organisation moves toward sustainability – through rigorous strategic analysis, programme management, performance measurement and leadership.

It is recognised that the most efficient and effective way to achieve these objectives is through the three building blocks of high performance:



Source: David, L. (2006), *Strategic Management*

Fig. 1. *Turning Sustainability into a Lever of High Performance*

Market focus and position: Market focus and position define the best business strategies on where and when to compete. Activities to integrate sustainability include stakeholder analysis, enhanced customer analytics and business intelligence, best practices for internal and external benchmarking, new product development, strategic portfolio management and considerations on how to win in both high-value and high-potential markets. Market focus and position enable top management to consider such key questions as:

- Are our strategies aligned with strengths, and are they realisable? In particular, where are the opportunities for sustainable growth?
- Do we have the right governance structure to deal with changing environmental issues, public agencies and stakeholders?
- Are we in the right businesses for the future?
- Are we making the right investments in the right areas of our business? What is the right pace? The right level?
- Does a shareholder/stakeholder value perspective permeate our metrics and decision making?
- Are we at risk from a specific stakeholder's point of view? Do we systematically map and prioritise stakeholders and issues?
- Do we manage to multiple horizons or do we focus excessively on one time frame?

Distinctive capabilities

Distinctive capabilities in sustainability allow managers to manage and integrate stakeholder expectations across a social, economic and environmental agenda, either working alone or in partnership. They produce actionable insights, optimised supply chains, smart technologies, product life-cycle innovation and optimal customer segmentation.

Distinctive capabilities provoke action on such key questions as:

- Do we monitor external developments in the political, economic, social and technological arenas and act accordingly?
- Do we set, communicate and measure long-term sustainability goals that guide and motivate our actions and behaviours across all functions and processes?
- Do we measure and manage integrated performance? Do we track qualitative and quantitative key performance indicators and their impact on core business performance?
- Do we plan for multiple scenarios – and do we have the organizational capability to adapt to a changing business environment?

Performance anatomy

Performance anatomy drives a flexible, scalable and integrated sustainability business model. It promotes long-term competitive advantage by multiplying talent and rewarding activities that support the organization's sustainability agenda. Above all, performance anatomy creates a culture of sustainability consciousness and strengthens new processes and activities. It helps executives support sustainability and communicate regularly on the progress they make.

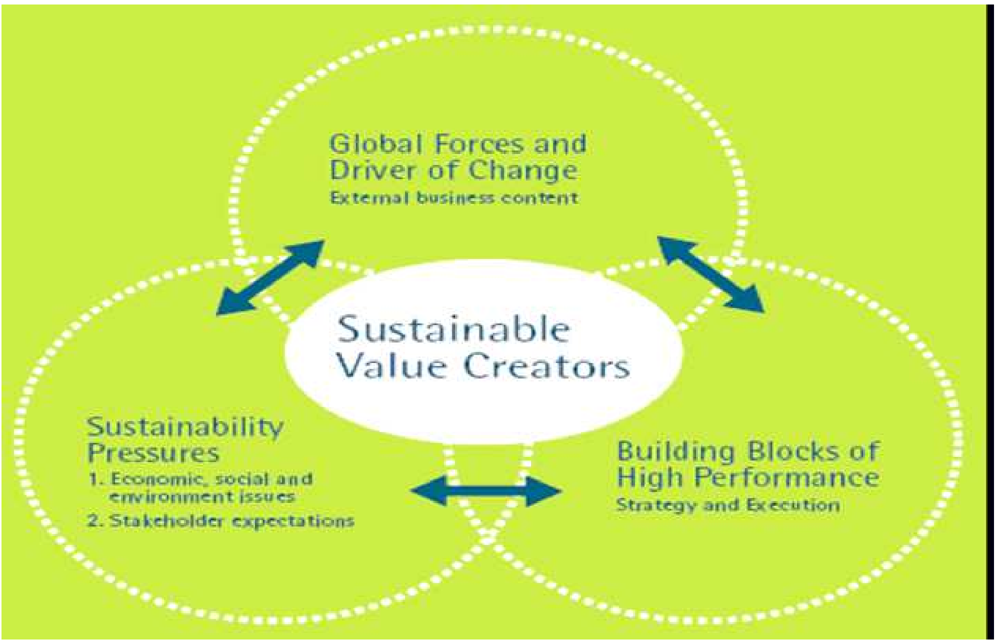
Performance anatomy inspires deep insights into such questions as:

- Do we have the right balance between making markets and executing effectively?
- Do we get more from our employees than our competitors get from theirs? Are our employees committed to delivering the discretionary effort that drives higher productivity? Are they personally engaged with our organization's strategy? Are we giving them the right training and development on sustainability to drive business performance?
- Do we use IT as a strategic weapon across the enterprise?
- Do we adequately balance intangibles that drive long-term success against financial measurement?
- Does our organization demonstrate the required agility in the face of uncertainty?
- Do we know – in real time – how we are performing against our targets?
- Do we have the operational data available to understand our challenges and opportunities in enough time to adjust for them?

5. ***Achieving high performance through sustainability***

There is no doubt that sustainability can and will drive dynamic change for industries and companies. In France, more than eight in 10 companies consider sustainable development to be a differentiating factor and believe their customers will demand new sustainable products and services. Most respondents also expect an increase in customer expectations over the next three years. The market shifts that make sustainability a pressing issue today will continue to evolve. They require companies to address sustainability's most immediate demands and also develop the ability to enable additional change as new sustainability driven market shifts emerge.

To achieve high performance in the short term, companies must understand their existing risks, competencies and opportunities across their supply and value chains. They must consider strategic options and develop new competencies to move from strategy to execution. Creating high performance for the long term will require more than new processes or technologies or regulatory compliance. It will entail new strategies and a transformation of organizational structure, culture and behaviour to thrive, not just survive, in a complex and fast changing landscape.



Source: Morgan, B.J. (2008), *Sustainable Value Creators*

Fig. 2. *Integrated view of sustainability and value creation*

Future sustainability leaders will align their strategies and operating models and the drivers of internal performance with the key building blocks of high performance. They will recognize that the way they create value is changing, and they will redefine what value means for their company and their industry. The imperative is daunting, but the prize is worth it – the opportunity to integrate sustainability into a repeatable formula for high performance, competitive advantage and value creation that benefits both shareholders and society at large.

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