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FROM OBLIGATION TO OPPORTUNITY

This book takes the contrarian's view that business—more than either government or civil society—is uniquely equipped at this point in history to lead us toward a sustainable world in the years ahead. I argue that corporations are the only entities in the world today with the technology, resources, capacity, and global reach required. Properly focused, the profit motive can *accelerate* (not inhibit) the transformation toward global sustainability, with nonprofits, governments, and multilateral agencies all playing crucial roles as collaborators. The book is written with a practical focus and should be of direct use to executives, entrepreneurs, and technologists, as well as business school faculty and students. The contents are equally appropriate, however, for those from the nonprofit world, the public sector, and society at large, especially those interested—and inclined—to collaborate with the private sector.

The book carries an optimistic message. Despite the gathering storm of environmental degradation, antiglobalization protest, and terrorism, it envisions a central and expanding role for commerce, particularly multinational corporations, in fostering global sustainability. It foresees massive opportunities for companies both to make money and to make the world a better place, particularly among the four billion poor at the base of the economic pyramid. This book is the result of an intellectual journey that began for me more than three decades ago. My own personal evolution is reflected in its structure and flow. Allow me to explain.

Having grown up in western New York in the 1950s and '60s, I have memories of family vacations spent at destinations like Niagara Falls. Although the Falls themselves were indeed magnificent, equally memorable for a 10-year-old was the soot from nearby factories that accumulated on the porch furniture, requiring that we clean the furniture daily, lest we ruin our clothes. The accompanying stench was also something to experience. I still remember asking why, in a place of such natural beauty and splendor, did it have to be so polluted? The answer, accepted wisdom in those days, was that this was "the smell of money." If we were going to have economic prosperity, then we would have to put up with some minor inconveniences, such as soot, stench, rivers that catch fire, and mountains of waste. It was the cost of progress. I remember being singularly unsatisfied by this response.

Fast-forward to 1974. As a freshly minted college graduate headed to Yale for graduate work in the School of Forestry and Environmental Studies, I was convinced that corporations were the "enemy" and that the only way to deal effectively with environmental problems was to "make them pay" through regulation—to internalize their externalities, in the jargon of economics. This was probably a correct perception at that point in history: Large corporations, by and large, had been unresponsive to environmental issues, and it appeared that the only way to deal with the problem was to force them to clean up the mess they were making. The Environmental Protection Agency, along with scores of

other regulatory agencies, was created precisely for this purpose. A mountain of command-and-control regulation was passed during the decade of the 1970s, aimed at forcing companies to mitigate their negative impacts.

Regulators and citizen activists, buoyed by their newfound power, increased the pressure on companies through fines, penalties, campaigns, and consent decrees. The courts became clogged with lawsuits aimed at halting projects that were deemed unacceptable due to their environmental or social impacts. Economists of the "environmental" variety wrote books about externalities and the public policies that would be required for them to be "internalized" most efficiently by companies.[1] In the process, companies became convinced that social and environmental issues were necessarily costly problems, usually involving lawyers and litigation. For better or worse, the message was that environmental and social issues were "responsibilities" that companies were required to deal with—and it was going to be expensive.

The Great Trade-Off Illusion

There can be no question that command-and-control regulation was of enormous importance; it *required*, perhaps for the first time, that business address directly its negative societal impacts. Since the time of the industrial revolution, enterprises had relied upon the extraction of cheap raw materials, exploitation of factory labor, and production of mass quantities of waste and pollution (think of those "dark, satanic mills"). Indeed, pollution was *assumed* to be part of the industrialization process. When economists conceived the concept of externalities, in other words, it seemed virtually impossible that firms could behave in any other manner. For the better part of 200 years, industrial firms engaged in what might be described as "take, make, waste" as an organizing paradigm.[2] Command-and-control regulation seemed a necessary and appropriate counter to the prevailing industrial mindset.

Paradoxically, this mindset also resulted in what I call the "Great Trade-Off Illusion"—the belief that firms must sacrifice financial performance to meet societal obligations.[3] A massive wall of environmental and social regulation has been spawned over the past 30 years, most of which has been written in a way that makes the Great Trade-Off Illusion a self-fulfilling prophesy. Just track the thickness (and lack of flexibility) of the Code of Federal Regulations in the United States for confirmation.[4] Too often, command-and-control regulations prescribed specific treatment technologies without regard to their efficiency or cost-effectiveness.

A generation of businesspeople was shaped by this framing of the situation. Not surprisingly, the managers and executives who rose to prominence during the postwar years were predisposed to think of environmental and social issues as negatives for business. A socially minded executive or company might "give back" to the community through philanthropy or volunteering, but such concerns would *certainly* never be part of the company's core activities! The social responsibility of business was to maximize profits, as Milton Friedman advocated, and it seemed clear that social or environmental concerns could only serve to *reduce* them.[5]

Even today, this mindset lingers. Try the following thought experiment: Imagine that you are a general manager in a business or company of your choosing. Your assistant calls saying that the environment, health, and safety (EHS) manager and the public affairs director are in your outer office, and they say the matter is *urgent*. What is your first reaction? If you are honest with yourself, you will have to admit that the first thoughts that come to mind are something like: *problem, crisis, spill, incident, accident, boycott, protest, lawsuit, fine,* or *jail time*. Your first instinct was probably to head for the back door of your office to escape.

But now try a second thought experiment: Your assistant calls saying that the heads of marketing and new product development are in

your outer office and they are anxious to meet with you. Now, what is your first reaction? What thoughts or issues come to mind? In all likelihood, your mind probably flashes to images like: *breakthrough, opportunity, blockbuster, innovation,* or *growth*. Your first instinct is to run to the front door of the office to let them in.[6]

The Great Trade-Off Illusion trained a generation of corporate, business, and facility-level managers to assume that societal concerns could only be drags on their business. As a consequence, their attitude tended to be *reactive*—they would do only the bare minimum necessary to avoid legal sanction. Unfortunately, when lawmakers and activists unfamiliar with operations or market dynamics write the rules for compliance, it is a virtual certainty that the rules will not integrate well with company strategy or operations. Taking a reactive posture thus doomed companies to a decade or more of onerous regulations that treated the symptoms rather than the underlying problems. These regulations targeted specific wastes, emissions, pollutants, and exposure levels through command-and-control-style rules that forced companies to deal with problems "at the end of the pipe" rather than addressing them as part of their core strategy or operations. Unfortunately, pollution-control devices can never improve efficiency or produce revenue; they can only add cost.

The Greening Revolution

The decade of the 1980s brought with it a growing sense of unease with command-and-control regulation. Despite enormous expenditures, it was not at all clear that the end-of-the-pipe approach to pollution control and regulation was working.[7] Alternatives such as market-based incentives and tradable emission permits demonstrated that pollution levels could be reduced in a dramatically more efficient and cost-effective manner. In Europe, a more collaborative and goal-oriented

approach to regulation was the norm; the focus was on actual environmental and social improvement rather than the specification of particular treatment technologies or pollution control devices.

I, too, was undergoing a transformation of sorts. In 1986, I joined the faculty at the University of Michigan Business School, having completed my doctoral work in strategy and planning in 1983. My transition from a regulatory to a business strategy orientation reflected my own growing disenchantment with the command-and-control approach to dealing with environmental and societal problems. Rather than simply trying to halt polluting projects or mitigate damage, I became increasingly interested in understanding why such seemingly bad projects were being proposed in the first place.

This change proved fortuitous: By the late 1980s, there was a growing receptivity to environmental and social issues within companies—and business schools. As luck would have it, this openness developed through innovation in another arena: quality management. As you might recall, in the late 1970s and early 1980s, Japanese companies were literally overrunning their American and European competitors with higher-quality and lower-cost goods. From steel makers to automobile firms, to consumer electronics manufacturers, companies were scrambling to match the Japanese quality advantage. Because of widespread plant closures and downsizing, there was palpable concern that the West would lose to "Japan, Inc."[8]

After three glorious postwar decades of high-volume, standardized mass production with quality *inspected* in (after the fact) rather than *built* in (as part of the design and production process), Western companies were being out-competed by a new and better way. Instead of countering with their own unique strategies, American and European companies became obsessed with learning and copying the ways of Japanese quality management.[9] Among other things, they built the capacity for "continuous improvement" (*kaizen*) into the management system by empowering workers to improve their work processes rather

than blindly following prescribed procedures. Managers' mindsets changed from a fixation on centralized control and a "results" orientation (detecting defects and fixing them) to a preoccupation on decentralization and a "process" orientation (improving the management system so that employees could *prevent* quality problems from occurring in the first place).[10]

Shattering the Trade-Off Myth

The confluence of the quality and environmental movements was a marriage made in heaven: By the late 1980s, it had become clear that *preventing* pollution and other negative impacts was usually a much cheaper and more effective approach than trying to clean up the mess after it had already been made. The emergence of market-based incentives such as tradable emission permits made prevention even more appealing. Furthermore, the discipline of quality management could be easily expanded to incorporate social and environmental issues. In the early 1990s, this confluence produced a flurry of so-called environmental management system (EMS) approaches and "total quality environmental management" protocols, culminating in the advent of ISO 14001, the environmental equivalent of ISO 9000 for quality.

Community advisory panels and stakeholder dialogues, intended to involve affected parties in company affairs instead of doing battle in court, proved to be a much more effective way to maintain legitimacy and the "right to operate." Indeed, in designing its self-regulation program called Responsible Care, the chemical industry enshrined the principles of pollution prevention and community engagement as part of its product stewardship process. In short, the quality revolution taught us that *muda* (waste) was the enemy of good management. Pollution and litigation were the ultimate forms of *muda*.

As social and environmental issues became more deeply embedded in the ongoing operations of enterprises, managers began to see that

corporate and societal performance need not be separated. Whereas companies previously sought to first make money through their business operations and then give back to society through philanthropy, now these two agendas could be merged. What had been a virtual firewall separating business from philanthropy was now transforming into a host of new and creative approaches to combining the two through corporate partnerships with nongovernmental organizations, strategic philanthropy, and other forms of social innovation.[11]

Furthermore, in certain situations, preventing pollution through process or product redesign could actually save money, reduce risk, and even improve products for the firm. An extensive body of research began to document the situations and contexts in which pollution prevention and product stewardship resulted in superior financial performance.[12] Not surprisingly, parlaying environmental and social performance into improved business performance required a set of supporting or complementary capabilities, such as employee empowerment, quality management, cross-functional cooperation, and stakeholder engagement. This meant that the greening revolution had not only succeeded in elevating the significance of social and environmental issues, but it also had converted them from expensive problems into strategic opportunities for certain firms with the necessary skills, capabilities, and leadership vision.[13]

Breaking Free of Command-and-Control

Accompanying the greening revolution in the corporate sector was the emergence of a new philosophy in regulation and public policy that recognized the limitations (and expense) of conventional regulation and the end-of-the-pipe mentality. In response, a slew of new *voluntary initiatives* were introduced that recognized the power of information disclosure and transparency.[14] The pioneering initiative was the Toxic Release Inventory (TRI) in the US. Passed in 1988 as a rider on the Superfund

Reauthorization (the law establishing strict liability for toxic waste sites), the TRI received relatively little attention in its early days. This seemingly innocuous provision required only that manufacturers disclose their use, storage, transport, and disposal of more than 300 toxic chemicals (all of which were perfectly legal at the time). Much to everyone's surprise, this data, maintained by the U.S. Environmental Protection agency, became an important new source of information for activist groups, the media, and third-party analysts to track corporate environmental performance. Top 10 lists of corporate polluters became *de rigeur*.

The TRI also provided, for the first time, a metric for corporate and facility managers to track their own firms' performance and benchmark it against competitors. What gets measured gets done. Ten years later, toxic emissions in the United States had been reduced by *more than 60 percent,* even though the U.S. economy boomed during the 1990s. Indeed, many companies actually saved tens of millions of dollars in the process of reducing or eliminating their toxic emissions.[15] We could argue that the TRI was one of the most important and effective pieces of social legislation ever passed. And it required nary a lawsuit, court battle, or inspector to make it happen. Since then, many developing countries have adopted a similar philosophy of transparency and information disclosure as the basis for their environmental policies, since these can be implemented at a fraction of the cost of command-and-control regulations.

Equally important was the advent of "extended producer responsibility" laws, primarily in Europe.[16] Quite simply, these laws stipulate that manufacturers are responsible for the products they create *all the way to the end of their useful lives*. Beginning with regulations on packaging waste in Germany in the late 1980s, these laws now extend to several industrial sectors, including automobiles, consumer electronics, and computers. Requiring that producers take back their products after they have reached the end of their life has obvious effects on the way

companies go about designing products in the first place. This simple requirement has fomented a revolution in product stewardship and "green design" protocols, using life-cycle management as its core principle. Rather than focusing only on the phase of the product's life cycle that the company controls (manufacture or assembly), product stewardship means designing products to take account of their entire life cycle, from the sourcing of raw materials and energy from the Earth to the reuse, remanufacture, or return of the materials to the Earth. Rather than thinking linearly, in terms of "cradle to grave," increasingly, designers think cyclically, in terms of "cradle to cradle."[17]

In the process, companies have discovered that life-cycle design principles can yield competitively superior products. During the early 1990s, for example, Xerox pioneered take-back, remanufacturing, and design-for-environment strategies in the photocopier business and reaped significant competitive benefits. Given the company's extensive field presence for servicing commercial copiers, it was relatively easy to take back used machines, refurbish parts and components, and produce a line of remanufactured machines. However, it was not until the mid-1990s that Xerox actually began to *design* copiers with an eye toward taking them back. This program, dubbed Asset Recycle Management, was founded on the notion that by reusing assets as many times as possible (recall that most Xerox commercial copiers were leased, not owned by customers), the company would not only reduce its environmental footprint, but also lower its costs and increase its return on assets. It set the goal of producing "waste-free products from waste-free factories."[18] By the late 1990s, Xerox was saving close to $500 million per year through this program, a figure approaching 2.5 percent of company sales. In fact, it can be argued that, given Xerox's failure to shift its strategy toward printers (since documents were increasingly being stored electronically and printed rather than duplicated), the Asset Recycle Management Program kept the company afloat for much of the 1990s.

As the green revolution progressed, leading companies began to shift their energy and attention more toward *proactive* strategies that reduced waste, emissions, and impacts while simultaneously reducing costs and risks. Paying real money for raw materials and inputs only to dump substantial amounts of these into the environment in the form of waste made little economic sense. In fact, Dow Chemical estimated in the early 1990s that reactive efforts such as regulatory compliance, cleanup, and remediation result in returns in the range of –60 percent while proactive initiatives typically produce positive returns in excess of 20 percent.[19] The problem was that most corporate activity (perhaps as much as 90 percent) was still of the reactive variety. The challenge was to transform the portfolio so that more was of the proactive sort. Ultimately, the goal is to get out of the regulatory compliance business entirely.

It was becoming clear that, *under the right circumstances,* firms could actually improve their own competitive position by creating societal value. They could, for example, lower costs by internalizing externalities through pollution prevention. Furthermore, through product stewardship, it was sometimes possible to supply public goods and achieve superior performance. Witness Volvo's new radiator that actually cleans the air as it cools the engine, or BP's climate-change policy that reduces its greenhouse gas emissions while reducing its costs. We should emphasize, however, the caveat "under the right circumstances:" Only through creativity, imagination, and the persistent development of particular skills and capabilities can firms simultaneously optimize financial, social, and environmental performance.

By the early 1990s, the greening revolution had led to the creation of a new dual-degree program at the University of Michigan involving both the Business School and the School of Natural Resources and Environment: the Corporate Environmental Management Program (CEMP). Integrating pollution prevention and product stewardship into the management curriculum was the backbone for this program. As the

founding director of CEMP, I had completed a virtual turnabout: It was now clear to me that the corporate sector itself was the key leverage point for achieving substantial and lasting change in societal performance, and that financial performance need not suffer in the process. I could finally put aside the demons from the past associated with "the smell of money." I came to realize instead that pollution was the smell of waste and poor management.

Beyond Greening

Yet, this personal reconciliation was by no means the end of the road. The corporate "greening" initiatives of the late 1980s and early 1990s—pollution prevention and product stewardship—were important first steps. They shattered the myth that business should treat societal issues as expensive obligations. Instead, seen through the prism of quality and stakeholder management, these issues could become important opportunities for the company to improve its societal and operating performance simultaneously. A growing body of research pointed to the potential for enhanced financial performance through well-executed pollution prevention and product stewardship strategies. Pioneers such as 3M, Dow, and Dupont realized significant cost reductions and enhanced reputations as a result of their activities. The World Business Council for Sustainable Development, with its mantra of "eco-efficiency," helped to erase the false dichotomy between business and environmental performance.

However, greening alone fell well short of what was possible—and needed: Incremental improvements to current product systems and production processes only slowed the rate of environmental damage. Sustainability means inventing a new form of "natural capitalism."[20] As University of Virginia architect Bill McDonough points out, greening is akin to heading in the wrong direction, but at a slower rate of speed—being less bad. Sustainability, however, means actually turning around

and heading in the right direction—being more good. It is, as McDonough and his colleague Michael Braungart point out, the difference between being eco-efficient and being eco-effective.[21]

Furthermore, most corporations continued to serve the needs of the wealthy exclusively while exploiting the developing world primarily for its abundant resources and cheap labor pool. A sustainable global enterprise would instead seek to create corporate and competitive strategies that simultaneously deliver economic, social, and environmental benefits for the entire world.[22] By the mid-1990s, it was clear that the corporate agenda was much bigger than just greening—and that the business opportunity was much more substantial as well. This was the key message of my 1997 McKinsey award-winning article in the *Harvard Business Review*, "Beyond Greening: Strategies for a Sustainable World." It was also my primary motivation for moving to the University of North Carolina at Chapel Hill in 1998 to become the founding director of the Center for Sustainable Enterprise at the Kenan-Flagler Business School.
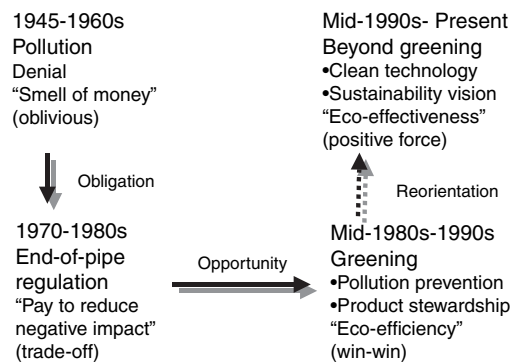
Corporations were being challenged to move beyond greening, first by pursuing new technologies that had the potential to be inherently clean (renewable energy, biomaterials, wireless IT), and second by reaching out to bring the benefits of capitalism to the entire human community of 6.5 billion people (rather than just the 800 million at the top of the economic pyramid). In recognition of this challenge, my colleagues at UNC and I launched in 2000 The Base of the Pyramid Learning Laboratory, a consortium of large corporations, new ventures, and nongovernmental organizations (NGOs) all focused on how best to serve the needs of the four billion people at the base of the economic pyramid (BOP) in a way that is culturally appropriate, environmentally sustainable, and economically profitable.

By moving beyond greening, companies hope not only to address mounting social and environmental concerns, but also to build the foundation for innovation and growth in the coming decades. In so doing,

they would outperform their competitors in today's businesses and, even more important, outrun them to tomorrow's technologies and markets. In short, sustainable global enterprises would create competitively superior strategies that simultaneously move us more rapidly toward a sustainable world.

Exhibit 1.1 summarizes the evolutionary path that corporations have followed over the past 50 years. Crossing the chasm from seeing societal performance as a trade-off or *obligation* (the left side of the figure) to a possible win-win *opportunity* (the lower-right side) was the major breakthrough of the 1980s. By the mid-1990s, many large corporations had internalized the capabilities and disciplines associated with greening, although some still had a long way to go. As a result, the competitive front migrated to the "beyond greening" domain (the upper-right portion).

Exhibit 1.1
The Long and Winding Road

1945-1960s	Mid-1990s- Present
Pollution	Beyond greening
Denial	•Clean technology
"Smell of money"	•Sustainability vision
(oblivious)	"Eco-effectiveness"
	(positive force)

Obligation ↓   ↑ Reorientation

1970-1980s	Mid-1980s-1990s
End-of-pipe	Greening
regulation Opportunity →	•Pollution prevention
"Pay to reduce	•Product stewardship
negative impact"	"Eco-efficiency"
(trade-off)	(win-win)

Rather than seeking incremental improvements to what already exists, moving beyond greening often means pursuing innovations that may make obsolete what currently constitutes the company's core business—it is an inherently disruptive act. Thus, given its focus on new technologies and markets, the "beyond greening" space is blessed with

much greater opportunities, but also fraught with bigger risks. One case in particular—Monsanto's controversial entry into genetically modified seeds—illustrates the potential opportunities and pitfalls of pursuing such strategies.[23]

Raging Against the Machine

In the mid-1990s, new CEO Robert Shapiro sought to revolutionize Monsanto. Through the power of his vision, he hoped to convert the firm from a chemicals manufacturer to a life-sciences company focused on "Food, Health, and Hope." Consistent with this vision, Shapiro spun off several strategic business units (SBUs) associated with the organization's chemicals business heritage, retaining only those closely tied to its life sciences focus. Simultaneously, he took the company on an acquisition binge, aggressively buying up biotech and seed companies, and huge debt in the process. The more focused—and leveraged—company then set out on a rapid growth strategy to make agricultural biotechnology a practical reality.

Shapiro also articulated how Monsanto's genetically engineered seeds gave the firm an advantage in the drive toward sustainability because they could increase farmers' yields, reduce pesticide use, and help to deliver nutrients to the world's chronically undernourished poor. In the space of a few years, Monsanto convinced farmers to plant nearly 60 million acres in the U.S. in genetically modified crops. In 1997, Shapiro also launched a new Sustainable Development Sector, empowering dozens of internal champions to identify and grow the new businesses of the future that would address global social and environmental concerns in an economically profitable manner. Between 1995 and 1997, Monsanto's stock price soared amid rosy projections of blockbuster products and rapidly expanding markets for agricultural biotechnology.

As a result of these developments, Monsanto was thrust into the public eye in a way that few companies had ever been in the past. Shapiro's portrayal of biotechnology's role in the future of agriculture generated unprecedented levels of public attention and scrutiny. This scrutiny resulted in problems for Monsanto as critics cast bright lights on incidents in which company actions did not match the spirit of Shapiro's vision.

For example, when Monsanto attempted to launch its genetically modified seeds in Europe, it met intense resistance from organic farmers and environmentalists, despite the fact that all the necessary regulatory approvals had been secured. Some Monsanto managers hired private investigators to ensure that customers (farmers) were not illegally saving Monsanto's genetically modified seed for replanting the following year. These actions and others alienated many who called into question Monsanto's true dedication to sustainable development and environmental stewardship. Shapiro's vision, in other words, did not always align with the actions taken by people in the company.

Other stakeholder groups included the millions of small farmers in developing countries such as India. These farmers protested against Monsanto in the streets, fearing that the company would enforce patents on essential grains and make them pay international prices for the seed they planted. Moreover, the farmers were concerned that Monsanto's patent ownership (via acquisition) of the "terminator" gene (seed-sterilization technology) would not allow them to practice the age-old tradition of propagating seeds from their own crops.

Regrettably, Monsanto did not enable these voices to reach business decision makers. The firm consulted with its immediate customers (large-scale farmers), regulators, and consumer groups in the United States. Despite efforts by the company's Sustainable Development Sector to access other voices, the business decision makers did not consider consumer groups in Europe or small farmers in developing countries to be legitimate or persuasive, even if their claims seemed urgent.

Instead of becoming a more open, innovative culture, the firm became more defensive and had to back away publicly from several of its biotechnology initiatives under pressure from growing protest. Indeed, in October 1999, Monsanto publicly apologized for its behavior: "Our confidence in this technology (genetic engineering) and our enthusiasm for it has, I think, been widely seen, and understandably so, as condescension and indeed arrogance."[24] External support for the firm's strategy had eroded, and in late 1999, the company followed through on merger talks with pharmaceutical maker Pharamcia & Upjohn. This move effectively ended the Shapiro era of sustainability-driven corporate strategy at Monsanto.

Smart Mobs Versus Smart Globalization

How do we account for the rapid rise—and even more precipitous fall—of a major corporation such as Monsanto, which had done nothing wrong according to society's legal and regulatory institutions and had, in fact, transformed its business model to add value to its customers while reducing environmental impact?[25] Certainly, the emergent nature of biotechnology had something to do with the problems that Monsanto experienced. Indeed, an accelerating pace of technological change appears to be generating ever-faster cycles of creative destruction.[26]

Yet there is even something more fundamental at work here. The power of governments has eroded in the wake of globalization and the growth of transnational corporations with global supply chains that span several continents. NGOs and civil society groups have stepped into the breach, assuming the role of monitor and, in some cases, enforcer of social and environmental standards.[27] Today, for example, there are more than 50,000 international NGOs, compared to fewer than 20,000 only a decade ago.[28]

At the same time, the spread of the Internet and other information technologies has enabled not only these groups, but also millions of individuals, to communicate with each other in ways that were unimaginable even a decade ago.[29] Indeed, Internet-connected coalitions of NGOs and individuals—smart mobs—are now making it impossible for governments, corporations, or any large institution to operate in secrecy.[30] The varied claims of these smart mobs have created a dynamically complex business environment in which organizations find it difficult to determine what knowledge is relevant for managing strategic change; just ask senior managers at Shell, Nike, the World Trade Organization, or the World Economic Forum.

Unfortunately, as the Monsanto case illustrates, most companies still tend to focus management attention only on known, powerful, or "salient" stakeholders—those who can directly impact the firm.[31] Even recent efforts at "radical transparency," the complete and truthful disclosure of an organization's plans and activities, appear inadequate because they entail reporting only what has already been decided or, in fact, accomplished. Yet in a world of smart mobs, firms cannot manage stakeholders. Instead, swarms of stakeholders self-organize on the Net in chaotic and unpredictable ways.

Groups at the "fringe" of a firm's stakeholder network can acquire an important voice in such swarms. To avoid the wrath of the smart mob, it has now become essential to proactively seek out the voices from the fringe that had previously been ignored. To survive and compete for the future, firms must harness these voices to identify creative new business models and opportunities. The tyranny of the smart mob can yield to a new form of what might be called "smart globalization:" growth via disruptive business models that address the social and environmental concerns of fringe stakeholders.[32]

Becoming Indigenous

The Monsanto experience holds an important lesson: If corporate sustainability strategies are narrowly construed, they will fall seriously short. It is not enough to develop revolutionary technology with the potential to leapfrog currently unsustainable methods. Antiglobalization demonstrators have made it apparent that if corporate expansion is seen to endanger local autonomy, it will encounter vigorous resistance. Multinationals seeking new growth strategies to satisfy shareholders increasingly hear concerns from many quarters about consumer monoculture, labor rights, and cultural hegemony. As long as multinational corporations persist in being outsiders—alien to both the cultures and the ecosystems within which they do business—it will be difficult for them to realize their full commercial, let alone social, potential. It was with this realization that I embarked on a new professional challenge in 2003, having accepted the SC Johnson Chair in Sustainable Global Enterprise at Cornell University's Johnson School of Management.

Today corporations are being challenged to rethink global strategies in which one-size-fits-all products are produced for the global market using world-scale production facilities and supply chains. Even so-called locally responsive strategies are often little more than preexisting corporate solutions tailored to "fit" local markets: Technologies are frequently transferred from the corporate lab and applied in unfamiliar cultural and environmental settings; unmet needs in new markets are identified through demographic (secondary) data. The result is stillborn products and inappropriate business models that fail to effectively address real needs.
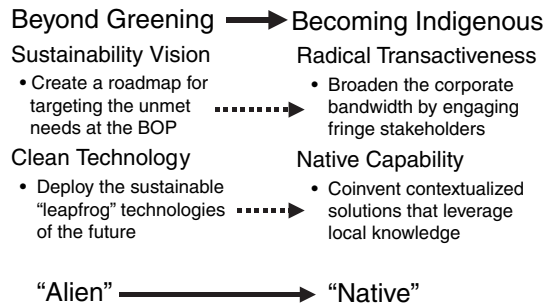
The next challenge will thus be for corporations to become "indigenous" to the places in which they operate (see Exhibit 1.2). Doing so will require that they first widen the corporate bandwidth by admitting voices that have, up to now, been excluded; this means becoming radically *transactive* rather than just radically *transparent*. It will also entail the development of new "native" capabilities that enable a company to

develop fully contextualized solutions to real problems in ways that respect local culture and natural diversity. When combined with multinational corporation's (MNC) ability to provide technical resources, investment, and global learning, native capability can enable companies to become truly embedded in the local context.

Unilever's Indian subsidiary, Hindustan Lever Limited (HLL), provides an interesting glimpse of the development of native capabilities in its efforts to pioneer new markets among the rural poor.[33] HLL requires all employees in India to spend six weeks living in rural villages, actively seeks local consumer insights and preferences as it develops new products, and sources raw materials almost exclusively from local producers. The company also created an R&D center in rural India focused specifically on technology and product development to serve the needs of the poor. HLL uses a wide variety of local partners to distribute its products and also supports the efforts of these partners to build local capabilities. In addition, HLL provides opportunities and training to local entrepreneurs and actively experiments with new types of distribution, such as selling via local product demonstrations and village street theaters.

By developing local understanding, building local capacity, and encouraging a creative and flexible market entry process, HLL has been able to generate substantial revenues and profits from operating in low-income markets. Today more than half of HLL's revenues come from customers at the base of the economic pyramid. Using the approach to product development, marketing, and distribution pioneered in rural India, Unilever has also been able to leverage a rapidly growing and profitable business focused on low-income markets in other parts of the developing world. Even more important, through its new strategy, HLL has created tens of thousands of jobs, improved hygiene and quality of life, and become an accepted partner in development among the poor themselves.

Exhibit 1.2
Indigenous Enterprise:
The Next Sustainability Challenge

Beyond Greening ⟶ Becoming Indigenous

Sustainability Vision
• Create a roadmap for
  targeting the unmet   ┈┈┈▶
  needs at the BOP

Radical Transactiveness
• Broaden the corporate
  bandwidth by engaging
  fringe stakeholders

Clean Technology
• Deploy the sustainable
  "leapfrog" technologies ┈┈┈▶
  of the future

Native Capability
• Coinvent contextualized
  solutions that leverage
  local knowledge

"Alien" ⟶ "Native"

The Road Ahead

To summarize, the greening initiatives of the late 1980s and early 1990s were revolutionary, if insufficient, steps: They repositioned social and environmental issues as profit-making opportunities rather than profit-spending obligations. More recent "beyond greening" strategies are even more significant: They hold the potential to reorient corporate portfolios around inherently clean technologies and create a more inclusive form of capitalism that embraces the four billion poor at the base of the economic pyramid. If narrowly construed, however, such strategies still position MNCs as outsiders, alien to both the cultures and the ecosystems within which they do business. The challenge is for multinationals to move beyond "alien" strategies imposed from the outside to become truly indigenous to the places in which they operate. To do so will require companies to widen their corporate bandwidths and develop entirely new "native" capabilities that emphasize deep listening and local codevelopment. A more inclusive commerce thus requires innovation not just in technology, but also in business models and mental frames.

Thus, as we enter the new millennium, capitalism truly does stand at a crossroads. The old strategies of the industrial age are no longer viable. The time is now for the birth of a new, more inclusive form of commerce, one that lifts the entire human family while at the same time replenishing and restoring nature. The path to a sustainable world, however, will be anything but smooth. It will be a bumpy ride strewn with the remains of companies that variously dragged their feet, made promises they could not keep, bet on the wrong technology, collaborated with the wrong partners, and separated their social and business agendas. Only those companies with the right combination of vision, strategy, structure, capability, and audacity will succeed in what could be the most important transition period in the history of capitalism.

Overview of the Book

This chapter has provided a guided tour of the argument contained in the book. The book itself is divided into three parts. Part One, "Mapping the Terrain," provides the background and context for the chapters that follow; it describes the global situation and establishes the business case for pursuing strategies that aim to solve social and environmental problems. It also outlines the challenges and opportunities that remain to be addressed, particularly those that involve the development of new, more sustainable technologies and the needs of the four billion people who have been largely bypassed thus far by globalization. Part Two, "Beyond Greening," then develops the logic and content of these "beyond greening" strategies in more depth. Finally, in Part Three, "Becoming Indigenous," I suggest how corporations might begin to move beyond even these strategies for sustainability by learning to become more embedded in the local context. Learning to become indigenous, I argue, is the next strategic challenge on the road to building a sustainable global enterprise.

Chapter 2, "Worlds in Collision," places the global challenges associated with sustainability in the larger context. It seeks to cut through the complexity by providing a readily digestible framework for thinking about the current global situation, characterizing it as the collision of three economies or worlds—the money economy, the traditional economy, and nature's economy. Ultimately, the challenge is to develop a *sustainable global economy*: an economy that the planet is capable of supporting indefinitely, while simultaneously providing for the entire human community in a way that respects cultural, religious, and ethnic diversity. This chapter seeks to put this challenge into perspective and offers some thoughts about appropriate roles for multinational corporations.

Chapter 3, "The Sustainable Value Portfolio," closes out the first section of the book by developing a detailed framework for connecting the agendas of sustainability and value creation. Just as companies must succeed on many fronts in order to create shareholder value, so, too, must they master economic, social, and environmental challenges to achieve sustainability. These challenges affect virtually every aspect of a firm's strategy. The chapter makes clear that although the biggest opportunity for the future lies in moving beyond greening, most companies still focus virtually all their attention on greening or (worse) mere compliance.

Part Two of this book develops the strategies that move beyond greening in greater depth. Chapter 4, "Creative Destruction and Sustainability," articulates the strategic logic for pursuing leapfrog strategies to clean technology in ways that open exciting new growth markets but also often make the firms' existing technologies and products obsolete. The chapter also shows how the lens of whole-systems thinking can help to prioritize investment in the new technologies and capabilities that will be important to the future competitiveness of the enterprise.

Chapter 5, "The Great Leap Downward," demonstrates why the four billion people at the base of the world economic pyramid represent the most attractive early market for many of the most exciting new clean technologies. Because most such technologies are disruptive and will, therefore, be resisted by established markets, the vast underserved populations in shantytowns and rural villages offer the most promising places to incubate and grow the technologies of tomorrow. In the process, they also provide platforms for new growth industries that hold the potential to revolutionize markets at the top of the pyramid—and move us much more rapidly toward a sustainable world.

Chapter 6, "Reaching the Base of the Pyramid," articulates some basic principles for successfully tapping into these emerging markets and shows how effective strategies will generate not only corporate growth and profits, but also local jobs, incomes, and solutions to social and environmental problems. By removing the constraints imposed on the poor, increasing their earning power, and creating new potential in poor communities, companies can identify and pursue previously invisible opportunities. To be successful in these new markets, however, companies must pursue *business model innovation* just as avidly as technological innovation.

Finally, Part Three of this book critically evaluates early "beyond greening" experiences and offers some prescriptions for how to move toward a more indigenous and inclusive form of commerce. Chapter 7, "Broadening the Corporate Bandwidth," first describes how the existing conceptions of "development" and "modernization" reflect a Western cultural bias and a preoccupation with simply raising income and GDP per capita. Together, these shortcomings significantly hinder efforts to imagine and build healthy communities and markets at the base of the pyramid. To successfully serve the needs of the entire human community, therefore, corporations must broaden their bandwidth. Radical transactiveness is the tool proposed to enable companies to hear the true voices of those who have been marginalized or ignored by globalization.

Chapter 8, "Developing Native Capability," then shows how critical it is to expand our conception of the global economy to include not just the transactions that occur in the formal economy, but also the myriad other forms of economic activity that are typically ignored—the informal economy, household production, and the barter economy, for example. Native capability means bridging the formal and informal sectors: Development at the base of the economic pyramid does not follow traditional patterns found in the developed world. Indeed, the chapter shows that success in this space means focusing on what is *positive* in the BOP, not just what is negative (corruption), or missing (Western-style institutions). Native capability then enables global firms to move beyond the existing transnational model, with its emphasis on global supply chains, world scale, and centrally developed—and often alien—solutions.

In the final chapter, "Toward a Sustainable Global Enterprise," the problem of terrorism is shown to be, at base, a problem of unsustainable development. Only by removing the underlying conditions that lead to extremist movements will we be able to move toward global sustainability. The Middle East thus represents the biggest immediate challenge—and opportunity—on the road to a sustainable global enterprise. Most of the book focuses on *what* companies might do to pursue the sustainability path—the strategies, practices, and capabilities that are required. What is less clear is *how* to pursue this path, particularly within the context of large, incumbent, multinational corporations. This chapter therefore closes with some thoughts on what it will take to make this happen in the real world of budgets, quarterly earnings reports, discounted cash flow analysis, and the discipline of the investor community.

Notes

1. For example, Allen Kneese and Charles Schultze, *Pollution, Prices, and Public Policy* (Washington, D.C.: Brookings, 1975); and Robert Dorfman and Nancy Dorfman, *Economics of the Environment* (New York: W.W. Norton, 1972).

2. Ray Anderson, *Mid-Course Correction* (White River Junction, VT: Chelsea Green, 1998).

3. It is not my intention here to suggest that trade-offs do not exist between corporate economic and societal performance. Clearly, in some situations, command-and-control regulation is the only viable solution. In others, however, it is possible to internalize externalities or even supply public goods in a way that facilitates economic performance. The problem has been blind adherence to the belief that such "win-win" situations are generally not possible.

4. Again, my intention here is not to suggest that command-and-control regulation does not serve an important purpose. For laggards and criminals, there is no option. However, for those firms seeking to move beyond compliance, such regulation can sometimes limit degrees of freedom and slow the rate of innovation.

5. Milton Friedman, "The Social Responsibility of Business Is to Increase Its Profits," *The New York Times Magazine* 13 September (1970): 32–33, 122–126.

6. My thanks to Paul Tebo at DuPont for this wonderful illustration.

7. Indeed, the Reagan administration in the United States was bent on reforming—or, better yet eliminating—these regulations.

8. Clyde Prestowitz, *Trading Places* (New York: Basic Books, 1988); Barry Bluestone and Bennett Harrison, *The Deindustrialization of America* (New York: Basic Books, 1982); and Ira Magaziner and Robert Reich, *Minding America's Business* (New York: Vintage Books, 1982).

9. Ironically, quality management was an American invention in the first place, but it was rejected in the 1950s by U.S. companies who were making too much money through high-volume, standardized mass production. Proponents such as Deming and Crosby found willing adopters, however, in the struggling companies of post-war Japan.

10. See, for example, Masaki Imai, Kaizen: *The Key to Japan's Competitive Success* (New York: Random House, 1986).

11. Excellent examples include Bill Shore, *The Cathedral Within* (New York: Random House, 1999); and Mark Albion, *Making a Life, Making a Living* (New York: Warner Books, 2000).

12. Michael Porter and Claas van der Linde, "Green and Competitive: Ending the Stalemate." *Harvard Business Review* (September/October 1995): 120–134; Stuart Hart and Gautam Ahuja, "Does It Pay to Be Green? An Empirical Examination of the Relationship Between Emission Reduction and Firm Performance," *Business Strategy and the Environment* 5 (1996): 30–37; Michael Russo and Peter Fouts, "A Resource-Based Perspective on Corporate Environmental Performance and Profitability," *Academy of Management Journal*

40(3) (1997): 534–559; Petra Christmann, "Effects of 'Best Practices' of Environmental Management on Cost Advantage: The Role of Complementary Assets," *Academy of Management Journal* 43(4) (1998): 663–680; and Sanjay Sharma and Harrie Vredenburg, "Proactive Corporate Environmental Strategy and the Development of Competitively Valuable Organizational Capabilities." *Strategic Management Journal* 19 (1998): 729–753.

13. For an excellent and in-depth treatment of greening as business opportunity and strategy, see Forest Reinhardt, *Down to Earth* (Cambridge, MA: Harvard Business School Press, 2000).

14. A. Marcus, D. Geffen, and K. Sexton, *Reinventing Environmental Regulation: Lessons from Project XL* (Washington, D.C.: Resources for the Future/Johns Hopkins University Press, 2002).

15. Andy King and Michael Lenox, "Exploring the Locus of Profitable Pollution Reduction," *Management Science* 47(2) (2002): 289–299.

16. See Nigel Roome and Michael Hinnells, "Environmental Factors in the Management of New Product Development," *Business Strategy and the Environment* 2(1) (1993): 12–27; and Ulrich Steger, "Managerial Issues in Closing the Loop," *Business Strategy and the Environment* 5(4) (1996): 252–268.

17. William McDonough and Michael Braungart, *Cradle to Cradle* (New York: North Point Press, 2002).

18. Fiona Murray and Richard Vietor, *Xerox: Design for Environment* (Boston: Harvard Business School Publishing, 1993).

19. Personal communication with Dave Buzzelli, Dow Chemical Company, 1996.

20. Paul Hawken, Amory Lovins, and Hunter Lovins, *Natural Capitalism* (New York: Little, Brown and Company, 1999),

21. William McDonough and Michael Braungart, *Cradle to Cradle*.

22. This is referred to as the "triple bottom line." See John Elkington, *Cannibals with Forks* (Gabriola Island, B.C.: New Society Publishing, 1998).

23. Erik Simanis and Stuart Hart, Monsanto *Company (A) and (B): Quest for Sustainability* (Washington, D.C.: World Resources Institute, 2000).

24. Robert Shapiro, *Address to Greenpeace's Annual Conference*, 1999.

25. This section is excerpted from Stuart Hart and Sanjay Sharma, "Engaging Fringe Stakeholders for Competitive Imagination," *Academy of Management Executive* 18(1) (2004): 7–18.

26. Robert Foster and Sarah Kaplan, *Creative Destruction* (New York: Currency Books, 2001).

27. David Korten, *When Corporations Rule the World* (West Hartford, CT: Kumarian Press, 1995).

28. Christopher Gunn, *Third-Sector Development* (Ithaca, NY: Cornell University Press, 2004).

29. Ann Florini, ed., *The Third Force: The Rise of Transnational Civil Society* (Washington, D.C.: Carnegie Endowment for International Peace, 2000).

30. Howard Reingold, Smart Mobs: *The Next Social Revolution* (Cambridge, MA: Perseus Publishing, 2002).

31. R. K. Mitchell, B. R. Agle, and D. J. Wood, "Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts," *Academy of Management Review* 22 (1997): 853–886.

32. See, for example, Anil Gupta and Eleanor Westney, eds., *Smart Globalization* (San Francisco: Jossey-Bass, 2003).

33. Brian Ellison, Dasha Moller, and Miguel Angel Rodriguez, *Hindustan Lever: Reinventing the Wheel* (Barcelona, Spain: IESE Business School, 2003).