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Rising Up to the Global Challenge

The world is your oyster. Do you have the right fork? —Thomas A. Stewart¹

What do we mean when we say that we live in an increasingly global world? If you are a Silicon Valley entrepreneur, it means that unless your business plan includes doing R&D in a low-cost, high-talent location, such as India, China, or Eastern Europe, you have almost no chance of being taken seriously by any venture capitalist. If you are Larry Page and Sergei Brin, the cofounders of Google, it means that you see your company as a born global player that will pursue customers everywhere almost from day one. If you are the CEO of Black & Decker, it means that you track the strategies of not only your long-established competitors such as Makita and Bosch but also new and aggressive entrepreneurial firms such as the Hong Kong-based Techtronic Industries. If you are the chairman of Nippon Steel, it means that you wake up every morning conscious of the possibility that your company may be an acquisition target for the global steel giant ArcelorMittal headquartered in Luxembourg but with steel operations on virtually every continent. If you are the CEO of Nokia, it means that the most important strategic question that you face may well be not how you will defend your market share in the United States and Europe, but how you will capture the attention and wallets of the next billion cell phone users in emerging markets, such as China, India, Indonesia, Brazil, Mexico, and Russia. If you are the finance minister of India, it means that you regard the ongoing integration of the country's economy with the rest

of the world as fundamental to the realization of your homeland's potential as an economic superpower. And, last but not least, if you are a recent MBA and a junior manager at Procter & Gamble, you vow never to forget that you do not have a prayer of making it into the top ranks of the company unless you combine superb on-thejob performance with extensive international experience.

The twin forces of ideological change and technology revolution are making globalization one of the most important issues facing companies today. The makeover from state-dominated, isolated economies to market-driven, globally integrated economies is proceeding relentlessly in all corners of the world, be it Brazil, China, France, India, Russia, or South Africa. Accelerating developments in the information and transportation technologies are making realtime coordination of far-flung activities not only more feasible but also more reliable and efficient. In addition, we can now witness a rapid rise in the emergence of born global companies, such as Skype, Joost, and Facebook. The rise of born global companies is further transforming the worldwide economic landscape.

In this emerging era, every industry should be considered a global industry and every business a knowledge business. Today, globalization is no longer an option but a strategic imperative for all but the smallest corporations. This is as true of firms in such industries as cement, construction, and health care, which have traditionally been quite local, as it is of firms in such industries as semiconductors, pharmaceuticals, and automobiles, which globalized many decades ago. The only relevant question today is: Is your company a leader or a laggard in engineering and exploiting the ongoing globalization of your industry? The central premise of this book is that, no matter what the industry, only those companies that successfully lead the global revolution within their industry arenas will emerge as the winners in the battles for global dominance.

Over the last twenty years, we have studied over two hundred global corporations through a variety of research methods: largescale surveys, case studies, and in-depth discussions with executives. We have also served as advisers and consultants to dozens of companies in their efforts to review, redesign, and recreate their global strategies and organizations. Building on this knowledge base, we provide herein a road map for smart globalization. We identify and focus on four tasks essential for any company to emerge and stay as the globally dominant player within its industry:

• People must ensure that their company leads the industry in identifying market opportunities worldwide and in pursuing these opportunities by establishing the necessary presence in all key markets. In some cases, these opportunities entail creating a new industry—as illustrated by Yahoo!, which pioneered the Internet portal market in many parts of Asia and Europe. In other cases, these opportunities might manifest in the form of transforming an existing industry as illustrated by CEMEX, whose global expansion has catalyzed a restructuring of the worldwide cement industry.

• People must work relentlessly to convert global presence into global competitive advantage. Presence in the strategically important markets gives you the right to play the game. However, it says nothing about whether and how you will actually win the game—doing so requires identifying and exploiting the opportunities for value creation that global presence offers. Converting global presence into global competitive advantage requires managers to address several important questions. How do you convert global scale into "economies" of global scale? How do you convert global scope into "economies" of global scope? How do you optimize the choice of locations for different activities? How do you foster knowledge sharing across locations? And how do you leverage your positions in various locations around the world to compete on a globally coordinated rather than disjointed basis?

• People must cultivate a global mindset. They must view cultural and geographic diversity as opportunities to exploit and must be prepared to adopt successful practices and good ideas wherever they come from. The global economic landscape is changing much faster than most people realize. The winning corporations of tomorrow will be those that look at the world not only through American, European, or Japanese lenses but also through Chinese, Indian, Russian, Brazilian, and Mexican ones.

• In developing their global strategies, people must take full account of the rapid growth of emerging markets, in particular the rise of China and India. China and India are the only two countries in the world that simultaneously constitute four realities: mega-markets for almost every product and service, platforms to dramatically reduce the company's global cost structure, platforms to significantly boost the company's global technology and innovation base, and springboards for the emergence of new fearsome global competitors. Given the game-changing nature of these realities, whether or not you have solid strategies for China and India will rapidly become a growing factor in determining whether or not your company is even a survivor ten years from now.

We begin the journey by examining some of the fundamental questions: What is globalization? What is driving globalization? And what do these trends imply for companies and for managers?²

What Is Globalization?

At one extreme, imagine a world that is a collection of economic islands connected, if at all, by highly unreliable and expensive bridges or ferries. At the other extreme, imagine the world as an integrated system where the fortunes of the various peoples inhabiting the planet are highly intertwined. The sneakers that you wear were manufactured in Indonesia. Your mutual fund company invests a part of your savings in companies listed on the Hong Kong Stock Exchange. The software that you just downloaded from the Web was developed in India. And the company that you work for routinely exchanges technologies and management ideas with its subsidiary operations in Japan and Germany. If you agree that, over the last fifty years, the world around you has undergone a transformation from something like the first scenario to something like the second one, then we would say that the worldwide economy is indeed undergoing a process of globalization. More succinctly stated, *globalization refers to growing economic interdependence among countries as reflected in increasing cross-border flows of three types of entities: goods and services, capital, and know-how.* The term globalization can relate to any of several levels of aggregation: the entire world, a specific country, a specific industry, a specific company, or even a specific line of business or functional activity within the company.

At a worldwide level, globalization refers to the aggregate level of economic interdependence among the various countries. Is the world truly becoming more global? Yes. As evidence, consider the following trends. In 2006, trade in goods and services stood at 31 percent of world GDP, up from 23 percent in 1999 and under 10 percent in 1970. Annual flows of foreign direct investment grew from 1.0 percent of world GDP in 1990 to 2.2 percent of world GDP by 2005. Trends in cross-border transactions in bonds and equities are even more dramatic. In 1970, such transactions as a ratio of GDP stood at less than 5 percent for the United States, Germany, and Japan. By 2005, they had grown to over 200 percent.³ The pace of globalization continues unabated—as evidenced by the fact that the total deal value of cross-border mergers and acquisitions grew from \$22 billion in 1990 to \$58 billion in 2000 to \$135 billion in 2005.⁴

The fact that the world economy is becoming more global does not in the least imply that all countries, all industries, or all companies are becoming globally integrated at the same rate. For a variety of historical, political, sociological, and even geographic reasons, diversity is and will remain one of the defining characteristics of humanity. Thus it is important to examine what this concept means at the level of a specific country, a specific industry, or a specific company.

At the level of a specific country, globalization refers to the extent of the interlinkages between that particular country's economy and the rest of the world. Historical and political reasons have caused some countries, such as Cuba, to remain quite isolated. Others, such as China, India, Russia, Brazil, and Mexico, have made great strides toward global integration—albeit at different speeds. Some of the key outcome indicators that can be used to measure the globalization of any country's economy are exports and imports as a ratio of GDP, inward and outward flows of both foreign direct investment and portfolio investment, and inward and outward flows of royalty payments associated with technology transfer.

Table 1.1 compares the global integration of China and India along some of the indicators at three points in time: 1980, 1997, and 2005. As this table indicates, starting from a roughly similar degree of economic isolation in 1980, China's economy has globalized at a much faster rate than has India's economy. The data also indicate that, over the last decade, India has begun to narrow some of the gaps.

At the level of a specific industry, globalization refers to the degree to which, within that industry, a company's competitive position in one country is interdependent with its competitive position in another country. Alternatively stated, the more global an industry, the greater the competitive advantage that a player within that industry can derive from leveraging technology, manufacturing prowess, brand names, and capital across countries. The greater the degree of such interdependence, the greater will be the extent to which the industry is dominated by the same set of global players who face each other in almost every market and coordinate their strategic actions across countries. The wireless handset industry, so far dominated globally by Nokia, Samsung, Motorola, and Sony-Ericsson, and the soft drinks industry, dominated globally by Coca-Cola, Pepsi-Cola, and Cadbury-Schweppes, are two examples of highly global industries. In contrast, the construction and the hospital industries, populated by hundreds of domestic companies all over the world, represent two good examples of industries still in the very early stages of globalization.

Some of the key outcome indicators of the globalization of an industry are the extent of cross-border trade within the industry as a ratio of total worldwide production, the extent of cross-border

	China			India		
	1980	1997	2005	1980	1997	2005
Exports of goods and services as percentage of GDP	6	20	38	7	12	21
External debt as percentage of GDP	2.2	15.6ª	11.2 ^b	12.0	25.0ª	15.6 ^b
Inward flows of foreign direct investment as percentage of GDP	1.7	4.9 ª	3.6	0.1	0.7ª	0.8

Table 1.1.	Global	Integration:	China	Versus	India
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^aData pertain to 1996

^bData pertain to 2004

Source: Abstracted from World Bank, World Development Reports 1998, 1999, and 2007.

investment as a ratio of total capital invested in that industry, and the proportion of industry revenue accounted for by players competing in all major regions of the world. For illustrative purposes, consider the ratio of cross-border trade to worldwide production. On this measure, relative to an index of 1.0 for all manufacturing industries, the mid-1990s figures for the computer industry were 2.2, for the auto industry 1.6, and for the pharmaceutical industry 0.7.⁵ These figures indicate that, in terms of cross-border flow of goods and services, the computer industry was more global than the auto industry, which was more global than the pharmaceutical industry.

What Is a Global Company?

Ask ten different executives "What is a global company?" and, more likely than not, you will get ten different answers. Some might argue that a global company is one that is pursuing customers in all major economies, in particular the Americas, Europe, and Asia. Others might argue that you are not really global unless you put down roots in every major market in the form of producing locally what you sell locally. Yet others might suggest that the real test of globalization lies instead in whether your business unit headquarters are globally dispersed, whether your top management team consists of individuals from different nationalities, and so forth.

There are two problems with each of these perspectives regarding the nature of a global company. First, each definition overlooks the fact that globality is a multidimensional phenomenon and, like the proverbial elephant, can never be understood fully from just one perspective—be it market presence, production bases, composition of the top management team, or any other. Second, each definition overlooks the fact that globality is a continuous variable along a spectrum from low to high rather than a categorical binary variable with only two extreme values (global and nonglobal).

As depicted in Figure 1.1, we believe that the concept of "corporate globality" should be viewed as a four-dimensional construct based on the premise that an enterprise can be more or less global along each of four major characteristics: globalization of market presence, globalization of supply chain, globalization of capital base, and globalization of corporate mindset.

The first dimension, globalization of market presence, refers to the extent to which the company is targeting customers in all major markets for its industry throughout the world. Even within the same industry, globalization of market presence can range from relatively low to very high. For example, in 2006, Wal-Mart generated 22 percent of its total revenues from outside the United States. In contrast, Target and Sears generated 100 percent of their revenues from within the United States and none whatsoever from foreign markets.

The second dimension, globalization of supply chain, refers to the extent to which the company is accessing the most optimal locations for the performance of various activities in its supply chain. It is entirely possible for a company to have fairly local or regional market presence and yet a highly globalized value chain or vice versa. For example, in 1999, as a key element of the turnaround strategy for British retailer Marks & Spencer, CEO Peter Salsbury announced plans to set up a global supply chain for apparel goods with manufacturing hubs in Portugal, Morocco, and Sri Lanka.⁶



Figure 1.1. Assessing Corporate Globality

Caterpillar Inc. represents another good example of a company with a global supply chain. In 2007, Caterpillar delivered products to customers in nearly two hundred countries, operated manufacturing centers in twenty-four countries (ninety-eight locations), and had research and design technical centers in nine countries (twenty locations). Thus Caterpillar's supply chain represented a complex global network of sourcing units, manufacturing centers, parts distribution centers, logistics centers, marketing offices, dealers, and customer locations.⁷

The third dimension, globalization of capital base, refers to the extent to which the company is tapping into the most optimal sources of capital on a worldwide basis. Baidu, China's leading Internet search and online advertising company, represents a good example of how it is entirely possible for a company to be quite "local" along the dimensions of market presence and supply chain and yet have a highly globalized capital base. Baidu's market base and operations are centered primarily in China. Yet in August 2005, the company chose to get itself listed on the U.S.-based NASDAQ. A listing on the NASDAQ can potentially yield many benefits for Baidu: access to a broader base of investors, greater international visibility, enhanced ability to use stock options for attracting top talent, and enhanced ability to make stock-based acquisitions.

Last but not least, the fourth dimension, globalization of corporate mindset, refers to the extent to which the corporation as a collectivity reflects an understanding of diversity across cultures and markets coupled with an ability to integrate across this diversity. The state of any enterprise's corporate mindset depends on the mindsets of the individuals who lead the enterprise as well as the organization that determines how these individuals interact, what information is collected, how it is processed, and how decisions are made. General Electric serves as a good example of a company with an increasingly global mindset. All GE businesses are managed through a global line-of-business structure; investment opportunities are identified and assessed on a global basis; corporate leaders are pushing hard to globalize "the intellect of the company"; and although the company has a strong worldwide corporate culture, the composition of the leadership itself is becoming increasingly diverse in terms of nationalities.⁸

What Is Driving Globalization?

Irrespective of the level of aggregation—the entire world, an individual country, a specific industry, or a particular company—globalization occurs because specific managers in specific companies make decisions that result in increased cross-border flows of capital, goods, or know-how. Two intertwined considerations are driving managers to make such decisions on an increasing basis: one, globalization is becoming increasingly feasible; two, globalization is becoming increasingly desirable. The following trends explain why.

First, an ever-increasing number of countries are embracing the free-market ideology. The policy shift from a planning to a market mentality is well known and has been well documented.⁹ Suffice it to say that, since the end of World War II, the gale winds of market forces have continued to gather momentum—starting from the de-

veloped economies (Table 1.2), moving on first to South Korea, Taiwan, Hong Kong, and Singapore, then to the other countries of Southeast Asia, and finally sweeping up other major economies, such as China, India, Latin America, Central and Eastern Europe including Russia, and parts of Africa. Table 1.3 provides evidence of ongoing liberalization in investment regimes across a whole horde of countries.

As a consequence of economic liberalization, free trade already has become or is rapidly becoming a reality within regional blocks, such as the EU, NAFTA, ASEAN, and Mercosur. Furthermore, the World Trade Organization continues to chip away at the remaining barriers to the free flow of capital, goods, services, and technology

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Country	1913	1950	1990			
France	21	18	5.9			
Germany	20	26	5.9			
United Kingdom	_	23	5.9			
Italy	18	25	5.9			
Japan	30	_	5.3			
United States	44	14	4.8			

Table 1.2. Average Tariff Rates on Manufactured Products (Weighted Average; Percentage of Value)

Source: Abstracted from UNCTAD, World Investment Report 1994.

	1994	1998	2005	
Total number of countries that changed their investment regimes	49	60	93	
Total number of regulatory changes	110	145	205	
Changes in the direction of liberalization or promotion	108	136	164	
Changes in the direction of control	2	9	41	

Table 1.3. Liberalization in Investment Regimes

Source: Abstracted from UNCTAD, World Investment Reports 1999 and 2006.

among countries and regional blocks. The financial crisis that engulfed much of East Asia, Latin America, as well as Russia during 1997–1999 accelerated the pace of structural reforms and the further integration of many countries in these regions into the global economy. As illustrated by Renault's acquisition of a controlling stake in Nissan and Tata Motors' acquisition of Daewoo's commercial vehicles business, countries such as Japan, South Korea, Thailand, Brazil, and Argentina have considerably eased the restrictions on foreign ownership of domestic assets and companies.¹⁰ In short, barriers to trade and investment among countries continue to decline rapidly and are making globalization increasingly more feasible and less expensive.

Second, technological advances continue their onward march. Table 1.4 depicts the sharp decline in the costs of air transportation, telecommunication, and computers since 1950. The decline in transportation costs has radically shrunk the cost of shipping goods across countries. During the two decades from 1980 to 2000, real sea freight costs fell by over 75 percent. In the case of computers and communications, the steep decline in costs has continued unabated since 1990. Aside from radical cost decline, the last two decades have also witnessed the emergence and widespread adoption of technologies such as videoconferencing, mobile telephony, voice-over-IP, e-mail, groupware (for example, Lotus Notes), and the Internet. These developments in information technology have dramatically reduced the "operative distance" between companies, their customers, and their suppliers and made coordination of farflung operations not only more feasible but also more reliable and efficient.

Third, the economic center of gravity is shifting from the developed to the developing countries. Assuming certain infrastructural conditions, economic liberalization promotes competition, increases efficiency, fuels innovation, attracts new capital investment, and generally bears fruit in the form of faster economic growth. Not surprisingly, the embrace of market mechanisms has allowed the developing economies of the world to start catching up with the advanced

Telecommunications, and Computers (in 1990 U.S. Dollars Unless Otherwise Indicated)						
Year	Average Air Transportation Revenue per Passenger Mile	Cost of a Three-Minute Call from New York to London	U.S. Department of Commerce Computer Price Deflator (1990 = 1000)			
1950	0.30	53.20				
1960	0.24	45.86	125,000			
1970	0.16	31.58	19,474			
1980	0.10	4.80	3,620			
1990	0.11	3.32	1,000			

Table 1.4. Declining Costs of Air Transportation,

Source: Abstracted from International Monetary Fund, World Economic Outlook 1997; and Richard J. Herring and Robert E. Litan, Financial Regulation in the Global Economy, Washington, D.C.: Brookings Institution, 1995, p. 14.

economies. International organizations such as the IMF already count Korea, Taiwan, Hong Kong, and Singapore-some of the world's poorest countries in the 1950s-among the advanced economies. Other, even larger economies are on their way to advancement, the most notable cases being China and India.

In its now famous BRIC Report issued in 2003, Goldman Sachs analyzed the fifty-year growth prospects for the four largest emerging economies (Brazil, Russia, India, and China) and contrasted them with the growth prospects for the six major industrialized economies (United States, Japan, Germany, United Kingdom, France, and Italy). The report predicted that China's GDP would overtake that of the United States by around 2040, that India's GDP would be 80 percent as large as that of the United States by 2050, and that the GDPs of Brazil and Russia would be larger than those of Germany, United Kingdom, France, and Italy and almost as large as that of Japan by 2050.¹¹ During the four years from 2003 to 2006, the actual growth rates of the BRIC economies have been far ahead of Goldman Sachs's predictions. Recent updates by Goldman Sachs predict that China may become the world's largest economy by around 2030–35 and India the world's second largest by around 2040–45.¹² To sum up, the probability appears high that, within the next thirty to forty years, the size of the market for most products and services within each of the rising giants, China and India, may be larger than that of the United States or the European Union.

Table 1.5 provides comparative data on the growth rates of the advanced versus the developing economies since 1989 along with projections through 2008. Indeed, the world's economic center of gravity is shifting. The advanced economies are relatively mature and, for most industries, offer modest prospects for growth. In contrast, many developing economies are experiencing much faster growth in virtually every industry ranging from toothpaste and lightbulbs to home appliances, cars, computers, Internet services, and, not surprisingly, even fine wine. Thus any company today that seeks to grow—be it ABB, Samsung, Sony, Coca-Cola, General Electric, Microsoft, Wal-Mart, or Google—has little choice but to go where the growth is. For the vast majority of the world's leading corporations, such growth is rarely just in the home market.

(Annual Fercentage Change in Real ODF)						
	1989–1998	1999–2008	Projected 2006–2007	Projected 2007–2008		
Advanced economies ^a	2.7	2.6	2.5	2.7		
Developing economies ^b	3.8	6.4	7.5	7.1		
World total	3.2	4.4	4.9	4.9		

Table 1.5. Comparative Data on Economic Growth Rates of Different Groups of Countries (Annual Percentage Change in Real GDP)

^a30 countries; for the complete list, see *World Economic Outlook April 2007*, International Monetary Fund.

^b143 countries; for the complete list, see *World Economic Outlook April* 2007, International Monetary Fund.

Source: Abstracted from International Monetary Fund, World Economic Outlook April 2007.

Finally, the opening of borders to trade, investment, and technology transfers is rarely a one-way street. Although this opens up new and much larger market opportunities for companies, it also opens up their home markets to competition from abroad. In other words, economic liberalization brings about not only access to a much larger market but also more intense competition. As a consequence, it fuels the ongoing race among competitors to seek a first-mover advantage in serving globalizing customers, capturing economies of global scale, exploiting the cost-reducing or qualityenhancing potential of optimal locations, and tapping technological advancements wherever they may occur. The net result of this competitive dynamic is that the quest for economies of global scale and scope has become a self-feeding frenzy—be it in automobiles, aluminum, pharmaceuticals, tires, retailing, or Internet commerce. As the business historian Louis Galambos observed, "Global oligopolies are as inevitable as the sunrise."¹³

Why Globalization Is Here to Stay

It is important to remember that, notwithstanding the increasing obviousness of today's "global village," this is not the first time that we have witnessed the emergence of globalization.¹⁴ Relatively unfettered trade, capital flows, and migration of people across national borders were very much a reality in many parts of the world during the period from the mid-nineteenth century to World War I. Barriers around national borders began to go up in 1914 and it was only in 1970 that the ratio of exports to world output again caught up with the figure for 1913.

There are, however, major quantitative and qualitative differences between the globalization of today and that of a hundred years ago. Average tariff rates are much lower now than at any time in the last two hundred years. And, relative to world GDP, the volumes of international trade, foreign direct investment, portfolio investment, and technology flows are much greater than ever. In the late nineteenth century, the term globalization would have been interpreted largely in terms of international trade and the flows of private capital from a few rich families to finance the building of railroads and other infrastructure in the new world. It also would have referred to economic integration among a relatively small number of wealthy countries. In contrast, the globalization of today encompasses every corner of the earth, is financed by the savings and retirement funds of billions of people, and is far more multidimensional and deeper than ever before. The present-day global enterprise—with interlinked value chain activities dispersed across the world—was virtually unknown and might well have been unthinkable in the late nineteenth century.

We like to use the terms "simple" versus "complex" globalization to distinguish today's globalization from that of yesterday. As depicted in Figure 1.2, much of yesterday's globalization could be viewed largely in terms of cross-border trade in either raw materials (think cotton or iron ore) or finished goods (think textiles or cars)—that is, goods at the two extreme ends of the value chain. In contrast, driven by the rapidly growing power of digital technologies as well as rapid declines in country risks, today's globalization is characterized by geographic dispersion of the company's value chain activities, the goal being to locate each activity (or sub-activity) in the most optimal location. As a result, a large and rapidly growing proportion of present-day cross-border trade consists of intermediate goods and services—that is, components and services located in the middle of the value chain.

As a good illustration of present-day "complex" globalization, consider the case of Li & Fung, a Hong Kong–based company that supplies over two thousand customers with both soft and hard goods from a network of eight thousand to ten thousand suppliers spread over forty countries. As a recent case study on the company observed, fulfilling an apparel order from a U.S. retailer could mean that the fabric may be woven in China, the fastenings may be sourced from South Korea, and the actual sewing may be done in Guatemala.¹⁵ In short, in the case of even an everyday product, such as a shirt or a



Figure 1.2. "Simple" Versus "Complex" Globalization

dress, different activities in the value chain are dispersed over several countries, creating a situation wherein trade in intermediate goods and services may well exceed the final trade in finished goods. Complex globalization of this kind would have been impossible without the power of present-day digital technologies.

It is a certainty that digital technologies will continue to make ours an increasingly connected world. Nonetheless, the emerging digital era is likely to be at best a mixed blessing for the global enterprise and for those responsible for leading it. On one hand, in a digital world you will have radically enhanced access to a wider base of potential customers and resources worldwide. On the other hand, this will also be true for your current competitors-and a whole range of potential competitors as well. Moreover, in the digital age, corporations will operate in a more transparent environment that will enable and foster greater comparison shopping by customers, faster imitation by competitors, and demands for enhanced accountability by investors. As Daniel Yergin observed, "The global shareholder is going to be an ever-tougher taskmaster. It's mathematically impossible for every company to be No. 1 or 2 in its market and for every fund manager to be in the upper quartile. As performance becomes more transparent, and information more accessible, the pressures [on companies] will only increase. There will be no rest, no matter how great the weariness."¹⁶

Implications for Companies

By definition, all strategic action represents a dialogue between the company and its environment. Every company must adapt to the changes in its environment that are inevitable. Yet there are choices. First, you can choose whether to be a first mover or a laggard in anticipating these changes and turning them into competitive advantage. Second, and perhaps more critically, you often have the power to shape the direction as well as the pace of environmental changes in ways that are more favorable to your own firm.

There are several fundamental changes in the global economic landscape that we regard as inevitable. First, the economic map of the world will change more radically in the next twenty years than it has in the last twenty. Given the commitment of the leaders in China and India to a widening and deepening of economic reforms, these two countries are likely to remain the most important economic stories. Notwithstanding China's rapid growth since 1979 and India's since 1991, these two economies have begun to acquire bulk only during the last few years. Because of the magic of compounding, continuation of high growth rates over the next two decades would have significantly greater material effect on the world's economic topography with each new year. In any case, China and India will be just two of the many important economic stories. Major countries such as Russia, Brazil, and Mexico have embraced economic reforms and begun the process of global integration only within the last twenty years. As these economies continue to gather momentum, they will increasingly become major contributors to the creation of new wealth on this planet. Thus it is a reasonable bet that in twenty years the economic center of gravity would not be merely shifting toward the developing countries, it may lie squarely in the middle of what we currently regard as the developing countries.

Second, the regional composition of the world's five hundred to one thousand largest corporations will be radically different in twenty years from what it is today. As a consequence, intra-industry competition will become significantly more intense. The Financial Times year 2000 list of the world's five hundred largest companies, based on market capitalization, included only three companies from India and (excluding seven companies based in Hong Kong) none from China.¹⁷ Barely seven years later, the *Financial Times* year 2007 list included eight companies from China and eight from India.¹⁸ Given the increasing bulk of these two economies (China and India), we deem it unthinkable that, in the year 2025, the composition of the world's largest five hundred to a thousand companies will look anything like what it does today. It is not inconceivable that, by 2025, well over one hundred of the world's five hundred largest companies may be headquartered in China or India.

Unlike the emergence of global competitors from Japan and South Korea during 1970–2000 (think Toyota, Sony, and Samsung), the more recent emergence of new global champions from China and India is already showing signs of taking place at a much faster and more fearsome pace. Virtually all Japanese and Korean giants grew organically. In contrast, the globalization of Indian and Chinese companies is likely to be much more acquisition-driven (look at Lenovo's acquisition of IBM's PC business and Tata Steel's acquisition of the Anglo-Dutch Corus). Capital markets, both public and private, are significantly more global today than they were two decades ago. Also, Chinese and Indian companies now have easy access to global investment banks (such as Morgan Stanley, Goldman Sachs, and Citigroup) as well as global consulting firms (such as McKinsey, BCG, and Bain) who are eager to help. The large size of Chinese and Indian economies also makes it more feasible for many domestic companies from these two countries to accumulate global scale before venturing abroad. It is important too that many of them are still being run by aggressive first generation entrepreneurs who are comfortable moving at great speed. Established MNCs from the developed countries overlook the threat from these new dragons and tigers at great peril.

To the list of budding powerhouses from China and India, one must also add rapidly growing players from other big emerging economies such as Russia (look at Severstal in steel), Brazil (look at Embraer in commercial airplanes), and Mexico (look at CEMEX in cement). In short, if you think that, having witnessed the emergence of global players from Japan and South Korea over the last twenty years, you understand what intense competition really means, watch out. Compared to the world of 2025, this may have been just a warm-up.

Third, the ongoing technology revolution will make real-time coordination of globally dispersed operations routine. International telecommunications prices have already fallen by over 75 percent over the last ten years. According to many predictions, cost and price declines over the next ten years are likely to be even steeper. Combine these trends with mobile and broadband telecommunications (voice, video, and Internet) and it is inevitable that real-time coordination with globally dispersed customers, suppliers, and across the company's own subsidiaries will become commonplace over the next twenty years. One major outcome of these trends will be a further increase in the intensity of global competition and an even more desperate search for the best locations for the execution of discrete activities in the company's value chain.

Assuming that these trends are inevitable, we believe that the following questions merit serious consideration for inclusion in the strategic agenda of any medium-sized or large company today:

• What must be (versus what is) the extent of your market presence in the world's major markets, particularly the major emerging markets, for your products and services? How should you build the necessary global presence? Rapid economic growth around the world, particularly in the emerging economies, will continue to create huge demand for virtually everything—be it shoes, cement, fast food, refrigerators, computer software, insurance, or management consulting services. Explicitly or implicitly, your decisions and actions will help decide the important question of who will supply the products and services to meet this demand—your company, your current competitors, or new entrants? Given the largely borderless nature of the Internet, many start-ups in the high-technology sector are now realizing that they have little choice but to globalize at Internet speed—lest some other player preempt them, perhaps by imitating their business model, and occupy the global market space. For such companies, the evolutionary trajectory may well need to be something along the following lines: start-up in year one, entry into another major region in year two, and full-scale globalization by year three or four.

• What must be (versus what is) the extent to which you capture the cost-reducing and quality-enhancing potential of optimal locations around the world for the execution of various activities in your company's value chain? How should you reduce the existing suboptimalities? Countries differ in cost structures, in ways of looking at the world, and in the pool of talent and ideas being generated on an ongoing basis. Capturing the comparative advantages of countries effectively and efficiently can create significant competitive advantage for your company. Witness the case of Nike, which must constantly scout for the lowest-cost manufacturing locations, and Microsoft, which must constantly scout for the best software talent wherever it may reside. Similarly, you have no choice but to look at the world not merely as a market to exploit but also as a potential gold mine to reduce your cost structure, recruit needed talent, and tap for new ideas.

• What must be (versus what is) the effectiveness with which you are able to exploit global presence and turn it into true global competitive advantage—as opposed to global mediocrity or even global mess? How should you eliminate the existing shortcomings? As we suggested earlier, global presence does not automatically translate into global competitive advantage. In fact, without systematic analysis, purposeful thinking, and careful orchestration, widespread global presence can easily degenerate into managerial distraction, resource duplication, and inefficiency. Thus you must constantly examine whether you are indeed doing the hard work needed to transform global presence into global competitive advantage.

• Is the mindset of your company's top management, indeed every employee, sufficiently global? As the world around you changes and new opportunities open up in various corners of the world, is your company generally a leader or a laggard in identifying and exploiting these opportunities? How should you create the needed global mindset? Managers, like all people, are the products of their origins and past experiences. It matters where you were born, what cultural environment you grew up in, where you live, whom you interact with, what media you are exposed to, and what you see and hear with your eyes and ears as you go about your daily business. Being human, each one of us individually is and will remain at least somewhat parochial. However, collectively, in the form of an enterprise such as Cisco, IBM, Sony, or ABB, we do have the possibility of creating a truly global mindset that treats the entire world as its home, that is sensitive to important events in any corner of the world, and that has the wisdom to differentiate between value-creating, value-destroying, and value-neutral opportunities. You must constantly ask whether your company has that type of a global mindset today and take developmental action, as needed.

Conclusion

We conclude this chapter by focusing on the implications of globalization for individual managers. We predict that knowledge, skills, and experience regarding how to navigate the company in a global environment will become increasingly a core requirement for promotion to leadership positions. We also believe that the need for global knowledge and skills will rapidly become crucial not just at senior levels in the company, but at all levels and in all units. A systems analyst in Stockholm may interact on a daily basis with software programmers in India. An R&D team may work on a collaborative development project spread across the United States, Japan, and Switzerland. A plant manager in Detroit may have crucial dependencies on auto parts suppliers in China, Mexico, Brazil, and Germany. A sales representative based in Atlanta may be an integral member of a global account management team serving the customers' needs across multiple locations on a coordinated basis.

Thus, totally aside from promotion to senior ranks, merely succeeding in one's local job will increasingly depend on skills at man-

aging across national and cultural borders. Look at the career backgrounds of the CEOs of two of America's largest companies—Procter & Gamble and PepsiCo. Alan Lafley, Procter & Gamble's CEO, spent several years in the 1990s running the company's Far East and later Asia operations before returning to the United States and eventually rising to the top post. Indra Nooyi, PepsiCo's CEO, was born in India and moved to the United States in the early 1980s as a graduate student. Both leaders bring to their jobs in-depth capabilities and experience in both general management as well as globalization. It is a certainty that such a picture will increasingly become the norm rather than the exception for the corporate leaders of tomorrow.

To sum up, notwithstanding the huge changes that we have witnessed in the last two decades, the extent and pace of change in the next two decades will almost certainly be much greater. In our view, the inevitability of these changes implies that companies and managers today face a relatively simple, but important, choice: get on board or get left behind.