INTRODUCTION: MOBILIZING MIND POWER

We believe that the centerpiece of corporate strategy for most large companies should become the redesign of their organizations. We believe this for a very simple reason: It's where the money is.

Let me explain: Most companies today were designed for the 20th century. By remaking them to mobilize the mind power of their 21st-century workforces, these companies will be able to tap into the presently underutilized talents, knowledge, relationships, and skills of their employees, which will open up to them not only new opportunities but also vast sources of new wealth.

We didn't come to this conclusion suddenly. In early 1999, we completed a book drawn from our research titled *Race for the World: Strategies to Build a Great Global Firm*.[1] This book was the end product of a major McKinsey-sponsored research effort focused on how companies could capture the opportunities that were evolving thanks to digital technology and the emergence of truly global marketplaces.

When we started the research in 1995, it was hard to make sense of what was happening. But gradually, we realized that a sudden fall in interaction and transaction costs (that is, the costs of people working with one another) was underway—due primarily to advances in digital technology

and the relaxation of geographic barriers to competition—and it was causing a fundamental transformation of the global economy. As a result, global markets for goods and services were forming and deepening across industries and geographies. All of a sudden, companies worldwide found they had an overabundance of strategic possibilities in terms of where they could compete, for which customers, in which services, and in which geographies. The simultaneous increase in economies of specialization, scale, and scope also created an abundance of choices in terms of how to compete (that is, as a focused specialist, as a cross-geographic acquirer, and so on). As opportunities opened for everyone, companies suddenly found themselves in a competitive free-for-all, which, in turn, led to an increase in the pace and intensity of competition globally.

Meanwhile, as global markets began to form in both goods and services and for capital and labor, nimble companies found an abundance of cross-geographic and cross-market arbitrage (for example, offshoring) opportunities. This also began to commoditize the value added of local companies, firms that had previously relied on privileged access to those markets for their competitive advantage. Most important, the fall in interaction costs greatly increased the relative value of intangible assets (for example, talent, knowledge, reputation, and relationships) relative to tangible assets (for example, labor and capital).

When the book was being published, the dot-com boom and stock market frenzy were in full bloom. Stock market valuations were heading into the stratosphere. I have to admit that we, like many others, were a bit enraptured by the possibilities of the "new economy" (or what is now called the "digital age"). Then the stock market suddenly tanked, and the dot-com boom passed by.

When it was over, we were left puzzling about whether it had all been hype or if there had been a fundamental change in the global business environment that demanded companies to operate differently. And if the latter was true, *what* was the change and *how* did the companies cope?

As with most complex puzzles, the answer to this question un-

folded at its own pace. One door led to another door, which led to another door.

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One of the doors was opened by our clients. As we worked with them to pursue the kinds of strategies we had described in *Race for the World,* we began to realize that most of our clients lacked the organizational capabilities necessary to engage in the pursuit. In particular, they lacked the ability to mobilize the intangibles they needed for success. Moreover, the way most of their companies were being managed—with a focus on delivering next quarter's earnings—made it impossible for line management to find the time to focus on new strategic initiatives (or even to free up sufficient discretionary spending or the talent needed to explore the opportunities seriously). Furthermore, given the pressure to make earnings, most found it difficult to justify making any serious investments in unproven "high-risk" initiatives.

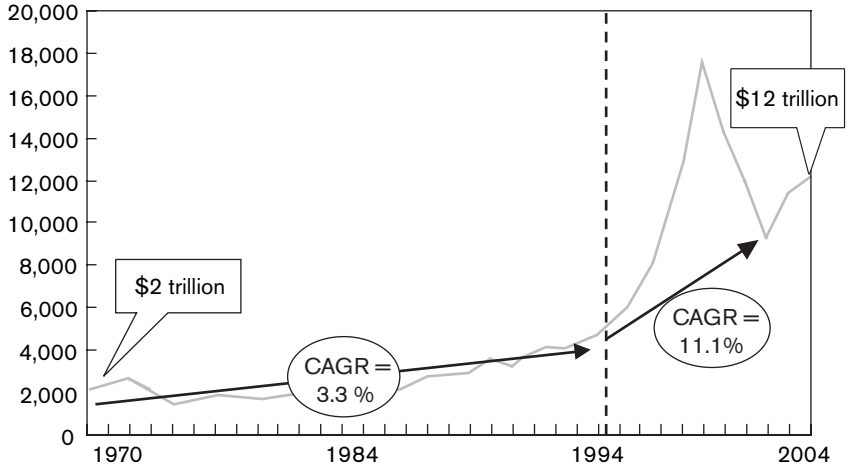
As companies expanded their scale and scope, we found that they were harder and harder to manage. Increasingly, individuals in essential positions found themselves in "undoable" jobs. We began to conclude that the organizing model that companies had been using in the 20th century was not working well in the 21st century.

But we were still left with our puzzle. Had the global economy really changed the business environment so much that it required companies to operate differently now from how they operated in the past? To answer this, in 2004 we decided to do a bit of forensics to gain a better understanding of what had changed economically. In this effort, I worked with a crack team, led by Michele Zanini from McKinsey's Boston office.

We began with the usual suspects, such as changes in returns on capital and growth rates in revenues, company by company. As Michele and I were sifting through the corporate records one afternoon, we saw something unusual: Despite the bursting of the bubble, the total profits and market capitalization of the largest 150 companies (ranked by market value) had grown at an unusually rapid rate even after having been

FIGURE I-1

Total Market Value of Top 150 Companies, 1970 through 2004*
(In billions of dollars)



*Only U.S. companies and U.S. ADRs of foreign companies; constant 2004 dollars; 150 largest firms in terms of market capitalization each year (i.e., individual firms enter or exit list based upon their relative market capitalization). *Source: Compustat; McKinsey analysis.*

depressed by the overall market swoon. It clearly could not have all been a bubble, or their earnings and stock prices would have reverted to pre-1995 levels.

Economic theory holds that very large companies should have had difficulty growing profits and market capitalization so rapidly. Increasing complexity, after all, places limits on economies of scale and scope. Indeed, for most of the last decades, very large companies *have* had trouble growing. From 1970 to 1994, the total market capitalization of the largest 150 companies (as ranked by market capitalization) grew at a rate of only about 3 percent annually, or a little more than the GDP growth, and that is what we would have predicted due to the limits on managing increased complexity.[2]

But what was puzzling to us that afternoon was that from 1994 to 2004, the total market capitalization of the very largest 150 companies had grown rapidly for a full decade—11 percent per year (Figure I-1).

Even after the deflation of stock prices in the aftermath of the 1997 to 2001 stock market bubble, the ability of these companies to grow market capitalization was staggering—some $7.5 trillion in a single decade by just 150 companies. This was despite the obvious reality that these companies were dealing with far more *external* complexity in terms of the size and diversity of markets being served in the emerging global marketplace than companies had ever dealt with before.

Even more surprising was that the lion's share of these increases in returns was being driven by just 30 of the very largest companies. They had created some $3.4 trillion of the increased market capitalization! Some of this was from acquisitions and new share issuance, but most of it was from creating greater new wealth. These top 30 companies made up just 2 percent of the top 1,500 public companies, but they equaled 22 percent of the increase in net income and 22 percent of the increase in market capitalization of the 1,500 from 1994.

So what enabled these very large companies to grow their profits and their market capitalization so rapidly?

We knew, of course, that advances in technology had lowered interaction and transaction costs, which was in turn driving fundamental changes in the entire global economy. But what was different about these global economic changes that could have enabled these results?

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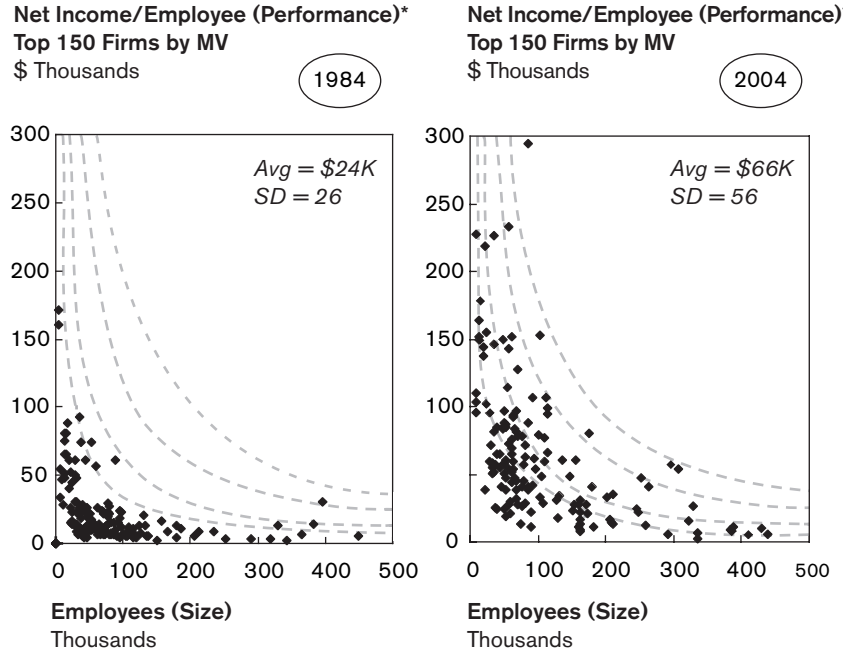
The breakthrough came when we decided to use the *number of employees* as a proxy for the *internal complexity of the company* and *profit per employee* as a measure of profitability. When we looked at the 150 largest companies by market capitalization in 1984 by these two standards, we found strong linkages between profits and the number of employees, and (just as economists would predict) we found that the more employees (that is, the more internal complexity), the lower the profits per employee. But when we ran the top 150 companies in 2004 through the same analysis, the historic tight linkages disappeared and were replaced by the more scattered image shown in Figure I-2.

FIGURE I-2

Changes in Net Income per Employee



The improvement in average performance over the last 20 years has been accompanied by substantially increased variance in performance.

* Excluding outliers and companies with negative net income; constant 2004 dollars.

Source; Compustat; Global Vantage; McKinsey analysis.

What does Figure I-2 mean? It shows that in the 21st century, some companies have organizing models that are less constricted by internal complexity limits. They can be bigger and more profitable than any of the others. But exactly *which* companies can pull off this trick?

To determine that, we divided the organizations into "thinking-intensive companies" (that is, companies with more than 35 percent of their workers in thinking-intensive jobs that require subjective thinking and problem solving) and "labor-intensive companies" (that is, companies with less than 20 percent of their workers in thinking-intensive

jobs). What we found was that in the case of the labor-intensive companies, the linkage between profit per employee and total employees really hadn't changed much from 20 years earlier. But, in contrast, the average profit per employee in companies with heavy mixes (that is, more than 35 percent) of thinking-intensive workers was higher, and the dispersion in results was much greater (Figure I-3).

This was one of our eureka moments. Suddenly we could see why some companies could earn higher profits per employee: The value of thinking-intensive workers is derived from the value of their minds—the ideas they develop and the decisions they make—and from the intangible by-products of that work, such as the knowledge, reputations, and relationships they create.

This, of course, helped confirm our earlier research, which had indicated that intangibles had become more valuable due to the changes in the global economy. The value of such "mind work" is not highly correlated just to the volume of hours worked but also to quality. The economic conditions of the 21st century are enabling some companies to create wealth by employing ever larger numbers of thinking-intensive workers who translate mind work into high-quality, high-return intangibles.

Complexity Frontier

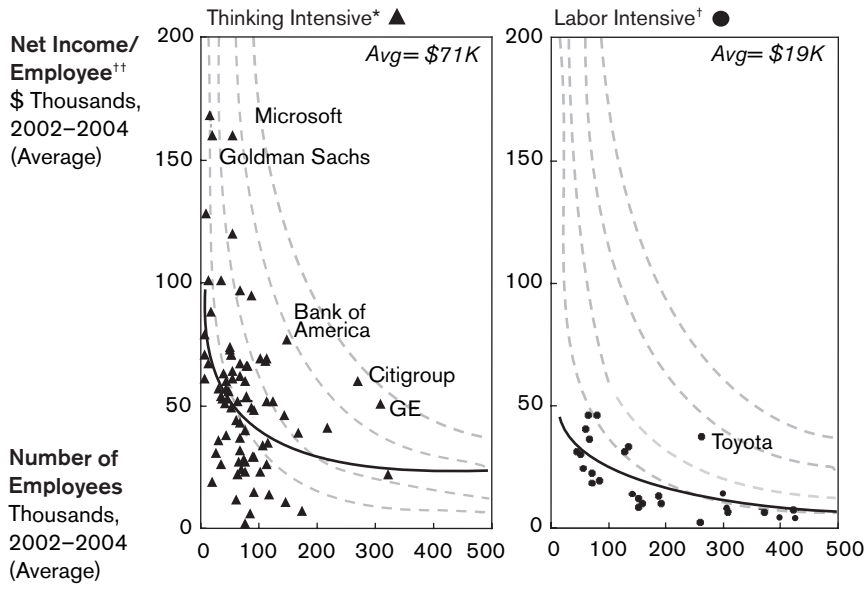
With that understanding in hand, we next began to probe what enabled some of the companies to outperform the others. Could it be that the top 30 had been able to use the technology of the digital age to defeat complexity?

The short answer is no. When we looked at the top 30 by market value, we saw clearly that an internal complexity limit still existed, even for these companies. We started to call this a "complexity frontier," a border that limits how much profit per employee even the best-performing companies can earn as their number of employees grows (Figure I-4).

But the notion of a complexity frontier helps explain how a company can grow its market capitalization: If you want market capitalization

FIGURE I-3

Effects of Talent Mix



- Emergence of outperforming companies in thinking-intensive sectors resulted in the recent dispersion of corporate performance.
- Performance of companies in thinking-intensive sectors was generally better and varied more widely, ranging $10–150K+ per employee vs. $10–50K for companies in labor-intensive sectors.

* Sectors with >35% managers and professionals and substantial value derived from judgment and autonomy of–assets created by–highly specialized workers (e.g., researchers, traders); includes financial services, pharmaceuticals, health-care providers, high tech, media and entertainment, and GE.

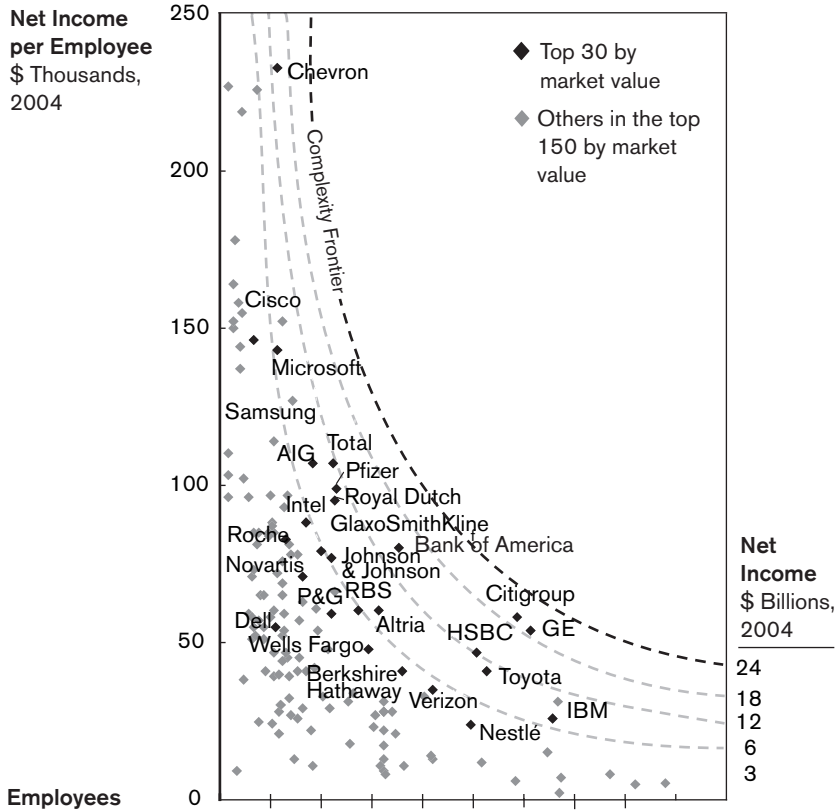
† Sectors with <20% managers and professionals and substantial value derived from production or process-oriented labor (e.g., factory workers, cashiers); includes automotive, chemicals, diversified manufacturing (excluding GE), retail and utilities; not pictured, Wal-Mart (1533, 5.9).
Sectors with 20–35% workers on thinking-intensive jobs (not shown) displayed level more similar to talent-intensive names than labor-intensive names but to a lesser degree.

†† Constant 2004 dollars; includes companies only with positive average net income per employee, excluding extreme outliers.

Source: Global Vantage; McKinsey analysis.

FIGURE I-4

Employee Profitability Frontier*



* Excludes firms with negative net income in 2004.
Not pictured: Wal-Mart (1700, 6) and ExxonMobil (86, 295). *Source: Global Vantage; McKinsey analysis.*

growth, either push back the internal complexity limits (which will enable you to increase profits per employee) or grow the number of people you employ (without diminishing the returns per person). Better yet, do both!

The Smoking Gun

Now that we had passed through that door, another one confronted us. Were the differences we were observing between the top 30 and the rest due to the particular industries these 30 firms were in? Or were they due to something about the companies themselves? To find out, we next compared the top 30 companies by market value to the next 30 largest in their same industries. Those results were startling. The top 30 employed an average of 198,000 workers (168,000 if you exclude Wal-Mart) while the next 30 employed only 117,000.

Now if you know nothing about the companies other than the number of their employees, you would expect a company with 100,000 employees to earn more per employee than a company with 200,000 employees because 100,000 should be less complex to manage. Indeed, the average top-150 company with 100,000 employees in 2004 earned about $50,000 per employee versus about $30,000 for an average top-150 company with 200,000 employees.

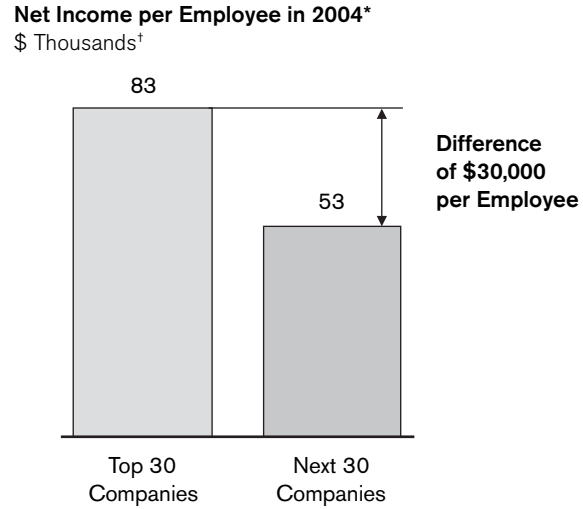
But when we compared the top 30 to the next 30 in the same industries, the top 30 actually earned *much more* per person despite employing far larger numbers of people—$83,000 per person versus $53,000 for the next 30 (Figure I-5).

As Michele Zanini said, "This is the smoking gun." Indeed, we realized the success of these companies (relative to others in their industries) was directly linked to their ability to generate "disproportionate rents" (that is, excess returns after paying for all costs including the costs of capital) from their thinking-intensive workforces.

It is significant that the differences in profitability are not based on industry differences. It means that the ability to create high profits per employee and to push back the complexity frontier lies within the

FIGURE I-5

Profits per Employee, 2004 (In thousands of dollars)



* "Top 30" is defined as the 30 largest companies ranked by market capitalization while the "next 30" is defined as the 30 next largest companies ranked by market capitalization in the same industries.
† In constant 2004 U.S. dollars. *Source: Global Vantage; McKinsey analysis.*

companies themselves—their organizational structures, their talents, their business models, and their intangibles—rather than in the industries in which they compete. Thus, the opportunities of the 21st century are internal to companies and, in particular, to how individual companies are organized. If you are effective in your internal organization, in other words, you can become far better at capturing profitable opportunities external to your company.

Does this mean that all you need to do is emulate the top 30 companies that have done so well over the last decade?

No. In the past few years, even the top 30 (excluding the oil companies as special cases) have been slowing down. From 2002 to 2005, their market capitalization has grown by only 6 percent compounded, much slower than the 11 percent they had marked for the decade before and

much slower than the growth rates of other large well-run companies (Figure I-6). Also, their earnings grew at a rate of "only" 8 percent over these years. From 1992 to 2001, these well-managed, top 30 companies had benefited greatly from the emergence of a more digital, more globally integrated economy to monetize intangibles and thereby push back the classic limits between internal complexity (that is, number of employees) and profits per employee. But in recent years, they seem to have run into new limits. Now, as the 21st century continues and as these companies are getting larger and more diverse, they are facing new growth limits due to internal complexity.

The Core Problem

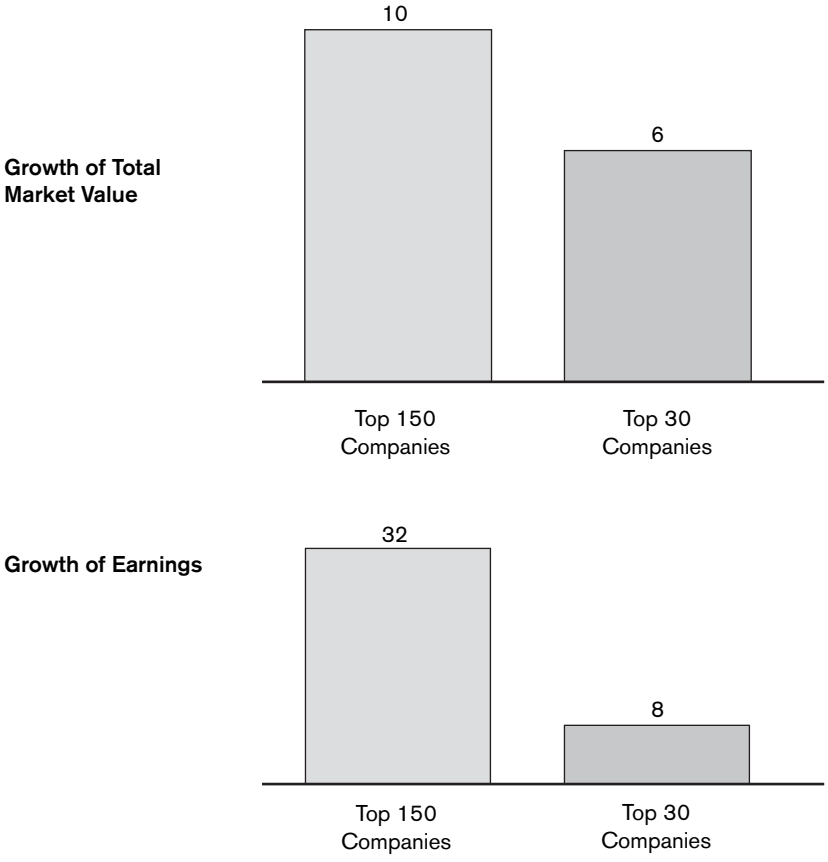
Why do even the best companies still face complexity constraints in the digital age? Why can't they capture the opportunities of today's global economy? Because even the best of today's companies were designed for another time. Although many of the top 30 are incredibly well managed, they are still employing an organizing model designed for an earlier era. They were built according to what we call the "20th-century model." They need to find new organizational approaches if they want to resume rapid growth in their earnings and market values.

Smaller, well-managed companies will soon be facing similar internal complexity constraints as they continue to get bigger and more diverse. Meanwhile, the great majority of other companies that are not nearly so well managed continue to operate far below the limits of the complexity frontier. Most companies still earn profits per employee at close to the same low levels earned in the 20th century because they have not become very adept at mobilizing the mind power of their workforces.

The truth is that almost all of today's companies, from the mediocre to the "superclass," were built primarily to mobilize their labor and capital assets—not the intangible assets that enable profits per employee to rise to levels never seen before. Trying to run a company in the 21st century with an organizing model designed for the 20th century places

FIGURE I-6

Growth of Market Value and Earnings for Top 150 Companies, 2002 through 2005* (Real compound annual growth rate [CAGR], percent)



* For top 150 firms by market value excluding companies in oil sector; constant 2005 dollars; the rapid growth in earnings of the top 150 is partly due to a number of large companies that experienced losses in 2002.

Source: Global Vantage; McKinsey analysis.

limits on how well a company performs. It also creates massive, unnecessary, unproductive complexity—a condition that frustrates workers and wastes money. The plagues of the modern company are hard-to-manage workforce structures, thick silo walls, confusing matrix structures, e-mail overload, and "undoable jobs."

As we will describe in this book, today's companies need to be redesigned to remove unproductive complexity while simultaneously stimulating the effective, efficient creation and exchange of valuable intangibles. They need to be designed so that they can mobilize mind power as well as labor and capital. In other words, we believe companies can overcome the organizational challenges they face and thereby create extraordinary wealth.

Opportunity to Create Wealth from Organizational Design

That's what this book is all about: We believe that all companies can increase their returns from talent and create wealth by designing organizations that fit the 21st century. We believe that companies can consciously design and build organizational interventions that can dramatically improve their ability to mobilize mind power to create high profits per employee. We believe further that these improvements can be derived from the companies' own, unique intangible assets enabling creation of "disproportionate rents" and thereby enormous wealth. We believe this applies not just to poorly managed companies but to well-managed companies too.

The opportunity to create wealth is massive.

If a company with 100,000 employees can make internal organizational design changes that add $30,000 more profit per employee (about the profit per employee difference from the top 30 and the next 30 in their same industries), for instance, it would add $3.0 billion in profits. Given that these profits would be what economists call "rents" (that is, additional earnings requiring no additional, marginal investment of capital or labor), at a 10 percent capitalization rate such increased profits would create $30 billion in new wealth.

If the company could also grow the number of employees earning such high levels of profit per employee by making such organizational design changes, the wealth creation potential would be much higher.

These numbers are not absurd. Remember that the average top-30 company added some $110 billion of market capitalization over the decade between 1994 and 2004 and that the great majority of that growth was new wealth creation, not new share issuance.

The opportunity is to build on each company's unique intangible assets. As David Ricardo famously observed, rents are created by having assets that are better in quality and unique in supply.[3] Today's unique assets are intangibles, which are specific to each company. The lesson to be taken from the impressive performance of the top 30 companies is not to try to imitate them. Companies, like people, have unique talents, organizational capabilities, and intangibles that have arisen from their own particular corporate histories. Trying to imitate a superclass company is like trying to imitate LeBron James's ability to play basketball or Yo-Yo Ma's ability to play the cello. Diversity of intangibles from company to company is good, not bad, for wealth creation. Each company needs to find its own place in the external marketplace by better designing how it operates internally so that it can better mobilize, deploy, and monetize the value from its own unique intangible assets that its talented people produce.

Think how big these opportunities can be. Every large company, even the most labor and capital intensive, has tens of thousands of workers in thinking-intensive jobs, not to mention tens of thousands of workers in other types of jobs who are producing only a fraction of the intangible value they could produce. We believe the target should be to improve profits per employee by 30 to 60 percent or more. As a comparison, the average top-30 company increased profits per employee 70 percent from 1995 to 2004 (from $39,000 to $67,000). The opportunities to improve the performance of workers just from increased *efficiency* alone are huge: Surveys show that a majority of workers in thinking-intensive jobs in large companies feel they waste from half a day to two days out of every workweek on unproductive e-mails, voice-mails, and meetings. For a worker paid $150,000 per year, this translates into wasting from $15,000 to $50,000 of what they are paid per year.

Meanwhile, the opportunities to improve the *effectiveness* of such workers are even larger. The opportunities to mobilize the latent intangible assets (that is, knowledge, skills, relationships, and reputations) of a company's workforce to improve performance are vast. How much business is lost simply because companies can't mobilize the knowledge and relationships within them to provide superior service to customers? How many of the average workers don't leverage the knowledge of the best workers? How many great business ideas are never realized because they never reach the right ears or because they are sunk by corporate politics or because no one has the time or spending capacity to pursue them? How many acquisitions deliver less than expected because the newly formed organization is dysfunctional and can't mobilize the mind power of the resulting merged company?

Organization Design as Corporate Strategy

For any large company, the value of better organizational design is literally in the tens of billions of dollars of increased market value. We believe the opportunity justifies the CEO and the top management team's devoting a large fraction of their total capacity to the internal task of designing and building the needed organizational capabilities. We believe organizational design is the key to unlocking the opportunities of the 21st century.

Relative to nearly any other equivalent investment of time or money a CEO and top management team can make, the potential returns from investing in improving the organization are truly remarkable. But redesigning the organization does not require enormous financial input. It is hard to conceive of how a company of 100,000 employees could spend more than a billion dollars on designing and building the strategic organizational capabilities described in this book. The decision to make such an investment is a no-brainer, especially if the opportunity is to improve profit per employee by $30,000 or more for 100,000 employees and to thereby create tens of billions of dollars of new wealth.

Moreover, unlike the external risks that accompany most strategic initiatives such as unpredictable competitors, the managing risks of organizational change lie largely within the control of the CEO and the top leadership team.

Strategic Imperative

We believe the time has come for corporate leaders to view organizational design as a strategic imperative and a high-return, low-risk opportunity for investment. The classic definition of "strategy" is a plan for actions to be taken with which to gain competitive advantage. Using this definition, we believe corporate leaders need to invest more energy than they have invested in the past in taking actions needed to create the strategic organizational capabilities that will enable their companies to thrive no matter what conditions they meet.

These strategic organizational capabilities will often take years of sustained effort to put in place, but they will pay off in terms of enduring competitive advantage. We believe furthermore that most CEOs will find that they will gain more leverage from focusing on organizational design than they will gain from nearly anything else they can do. Under this theory, you can't control the weather, but you can design a ship and equip it with a crew that can navigate the ocean under all weather conditions.

This is not to say putting a new organizational model in place is easy. Many top leaders are more comfortable making a major acquisition than attempting a major organizational change. The organizational inertia in a large company is often considerable. Organizational design work is hard and time-consuming, and organizational change usually requires dealing with difficult personality issues and corporate politics. Many CEOs would much rather make "big" strategic decisions than make "small" decisions as to where and how to compete or how to resolve internal organizational issues.

Yet, we argue, organizational design is where the money is in the

21st century. Only the corporate leaders can address enterprisewide organizational issues. If they want to create wealth, leaders need to focus their energy and their minds on making their organizations work better.

The Road Forward

So what do we propose?

Most of this book is about the nuts and bolts of designing an organization to capture the opportunities of the 21st century. The first chapter focuses on understanding the complexity facing large companies that are still using an organizing model designed for the 20th century instead of adapting their organizations to the new digital age. The second chapter describes how to think about organizational design within the context of the history of organizational development, and it describes nine ideas to better capture opportunities in the 21st century.

We then devote a chapter to each idea. Which ideas are the most important will vary with the company.

The first ideas are about how to manage better given the requirements of the 21st century. In Chapter 3, we describe opportunities for already well managed companies to remove complexity from their management structures by improving how they use hierarchical authority to drive performance. Specifically, we offer some ideas about how to create a backbone line hierarchy and "frontline field commanders" to improve the ability of managers to mobilize not just labor and capital but also mind power. This set of ideas is most helpful for companies that are finding that their internal complexity is making them hard to manage.

In Chapter 4, we offer ideas about how to move to a "partnership at the top" that combines approaches to one-company governance drawn from best-practice public companies and large private partnerships to create the conditions needed to enable large-scale, enterprisewide collaboration. This set of ideas is most helpful to companies afflicted with thick silo walls, which cause them to have trouble operating as single, integrated firms.

We offer some new ideas in Chapter 5 on how to manage companies dynamically so that they can balance their need to deliver operating earnings with their need to discover, simultaneously, new strategies to create wealth in a rapidly changing world. In particular, we focus on how a portfolio-of-initiatives approach to strategy, using staged gate investment practices, can help companies navigate the confusion, complexity, and uncertainty of today's rapidly changing digital economy to find intangible-based and high-return, low-risk opportunities. These ideas are most helpful for companies that are finding it difficult to grow earnings and to balance short-term versus long-term trade-offs.

We then offer some new ideas in Chapters 6, 7, and 8 for how to enable intangibles to flow better through large companies. As the digital age comes into its own, these ideas, which include formal networks, talent marketplaces, and knowledge marketplaces, are only now becoming possible.

Within companies, formal networks provide the organizational structures to harness the power of the natural communities of mutual interest that have emerged spontaneously in the digital age. A talent marketplace enables managers to "pull" the best talent, given their needs, from large pools of talent, while simultaneously giving that talent a greater choice over assignments to find the job that best fits their skills and development needs. A knowledge marketplace enables companies to motivate knowledge creators and knowledge seekers to exchange knowledge out of mutual self-interest. Each of these approaches enables the removal of unproductive complexity while stimulating the efficient, effective mobilization of mind power. These ideas have relevance to nearly every company, although poorly managed companies will find that before they can pursue them, they first need to address their management challenges.

The final set of ideas is aimed at modifying internal financial performance metrics and the evaluation of individuals in order to change the behaviors of all of a company's professionals and managers. We believe almost all companies are far too focused on producing accounting earnings and accounting returns on capital when they should be focused

instead on creating increasing economic returns from intangibles. Furthermore, they rely too heavily on measures of individual accountability and not enough on measures of mutual accountability, thereby promoting dysfunctional behaviors. In Chapters 9 and 10 we will be offering some far-reaching—some would even say radical—ideas that involve fundamentally redesigning a firm's internal financial performance measurement and performance evaluation systems so that they will motivate and drive better, more economic, wealth-creating behaviors.

The last chapter explains how to pursue organizational design as a corporate strategy. It lays out an approach to converting rough-sketch organizational ideas, such as those described in this book, into actual practice without taking excessive risk. This chapter also describes how companies need to put the same energy and focus into designing their own organizations that they have historically devoted to their design of new production processes or new products or to their entry into new markets.

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If you are intrigued by our premise, let us explain in the following chapters how it really could be done.

Lowell L. Bryan
November 1, 2006