# The End of Management?

HAT DOES THE FUTURE OF MANAGEMENT LOOK LIKE to you? Cast your mind forward a decade or two and ask yourself: How will tomorrow's most successful companies be organized and managed? What new and unorthodox

management practices will distinguish the vanguard from the old guard? What will managers in bellwether organizations be doing, or *not* doing, that would surprise today's business leaders? What will be different about the way companies manage talent, allocate resources, develop strategy, and measure performance?

In other words, can you imagine dramatic changes in the way human effort is mobilized and organized in the years to come? Can you envision radical and far-reaching changes in the way managers manage? Don't be dismayed if the answer is "no." Given how little the practice of management has changed over the past several decades, it's hardly surprising that most people have a hard time imagining how management might be reinvented in the decades to come.

## Management— A Maturing Technology

Then compared with the momentous changes we've witnessed over the past half century in technology, lifestyles, and geopolitics, the practice of management seems to have evolved at a snail's pace. While a suddenly resurrected 1960s-era CEO would undoubtedly be amazed by the flexibility of today's real-time supply chains, and the ability to provide 24/7 customer service, he or she would find a great many of today's management rituals little changed from those that governed corporate life a generation or two ago. Hierarchies may have gotten flatter, but they haven't disappeared. Frontline employees may be smarter and better trained, but they're still expected to line up obediently behind executive decisions. Lower-level managers are still appointed by more senior managers. Strategy still gets set at the top. And the big calls are still made by people with big titles and even bigger salaries. There may be fewer middle managers on the payroll, but those that remain are doing what managers have always done—setting budgets, assigning tasks, reviewing performance, and cajoling their subordinates to do better.

Why does management seem stuck in a time warp? Perhaps it's because we've reached the *end* of management—in the sense that Francis Fukuyama argues we've reached the end of history. If liberal democracy is the final answer to humankind's long quest for political self-determination, maybe modern management, as it has evolved over the last century, is the final answer to the age-old question of how to most effectively aggregate human effort. Perhaps we have more or less mastered the science of organizing human beings, allocating resources, defining objectives, laying out plans, and minimizing deviations from best practice. Maybe most of the really tough management problems have already been solved.

Or maybe not. What if modern management hasn't reached the

apogee of effectiveness and, given the challenges that lie ahead, isn't even climbing the right hill? Stuart Kauffman, the gifted biologist and Santa Fe Institute alumnus, uses the notion of a "fitness landscape" to describe the limits of evolutionary progress. In Kauffman's allegorical mountain range, higher peaks represent higher levels of evolutionary accomplishment. As a species adapts and changes, it climbs ever higher in the fitness landscape. In the beginning, starting from a deep valley, every trail leads upward. But as a species evolves, the percentage of terrain that lies above it steadily dwindles. Over time, there are fewer and fewer routes that lead upward, and ever more that lead downward. As a result, the pace of evolution slows. In an expansive fitness landscape, that is, one with many possible pathways, it is unlikely that a particular species will ever scale the evolutionary equivalent of K2 or Kangchenjunga. Instead, its meandering journey will probably end on the summit of a local peak—a crag that is, by comparison, a mere shadow of the mountains that loom over the horizon.

I believe this may well be the plight of modern-day management. Having evolved rapidly in the first half of the 20th century, the "technology" of management has now reached a local peak. Rather than being perched atop some Everest of accomplishment, it is reclining contentedly on a modest mound in the Appalachians—Mount Love, let's say. While it's possible to see higher peaks from Mt. Love's near-2,000-meter summit, none of them are the 8,000-meter monsters of the Himalayas.

This is not to sell the achievements of management short. If you have two cars in the garage, a television in every room, and a digital device in every pocket, it is thanks to the inventors of modern management. For while institutional innovations such as the joint stock company and patent law paved the way for modern economic progress, and while technology breakthroughs—from the telephone to the microprocessor—provided much of the fuel, it was the invention of industrial management at the dawn of the 20th century that turned enlightened policy and scientific discovery into global prosperity.

Indeed, one could argue that the machinery of modern management—which encompasses variance analysis, capital budgeting, project management, pay-for-performance, strategic planning, and the like amounts to one of humanity's greatest inventions—right up there with fire, written language, and democracy. Consider the vacation-bound college student who spends less on an airline ticket to Fort Lauderdale than he'll spend on booze over spring break; the twitchy-thumbed gamer who shells out a few hundred bucks for a PC and expects to get a machine that will outperform yesterday's supercomputers; the dedicated foodie who is unimpressed by the fact that her upscale supermarket offers more than twenty varieties of Balsamic vinegar; or the Chinese factory worker who will soon be able to afford his first motorbike—all these souls, and a couple billion more, should prostrate themselves in front of shrines to Daniel McCallum, Frederick Winslow Taylor, Max Weber, Chester Barnard, W. Edwards Deming, Peter Drucker, and all the other apostles and prophets of modern management.

Yet over time, every great invention, management included, travels a road that leads from birth to maturity, and occasionally to senescence. This is the familiar S-curve, and its dynamics mirror those of Kauffman's evolutionary hike. New inventions, like Gottlieb Daimler's gaspowered buggy, which debuted in 1886, typically get off to a slow start. At the beginning, there are dozens of technical challenges that bedevil inventors and curtail progress. As these initial hurdles are surmounted, the pace of improvement accelerates. Knowledge compounds, and soon whole clusters of innovation are redefining what's possible. Inevitably, though, the law of diminishing returns kicks in and at some point the ratio of progress to effort starts to sag. As physical limits are reached, major advances become harder to achieve.

Alas, management's boisterous, inventive adolescence lies nearly a century behind us. In fact, most of the essential tools and techniques of modern management were invented by individuals born in the 19th century, not long after the end of the American Civil War. Those intrepid pioneers developed standardized job descriptions and work

methods. They invented protocols for production planning and scheduling. They mastered the intricacies of cost accounting and profit analysis. They instituted exception-based reporting and developed detailed financial controls. They devised incentive-based compensation schemes and set up personnel departments. They created sophisticated tools for capital budgeting and, by 1930, had also designed the basic architecture of the multidivisional organization and enumerated the principles of brand management.

Now think back over the last 20 or 30 years of management history. Can you identify a dozen innovations on the scale of those that laid the foundations of modern management? I can't. Like the gasoline engine, our industrial-age management model is languishing out at the far end of the S-curve, and may be reaching the limits of its improvability.

Of course, this begs the question of whether we actually *need* a new management model, and if so, whether there's one out there waiting to be found. Perhaps we should be celebrating the end of management. Maybe after decades of striving, there are no more towering peaks to climb and no new S-curves to be discovered.

Yet before we break out the champagne, we should ask ourselves whether we're truly satisfied with the status quo. Are our workaday lives so fulfilling, and our organizations so boundlessly capable, that it's now pointless to long for something better? I don't think so. Again, consider democracy. Although it may be, as Winston Churchill famously put it, the worst form of government except for all the others, it contains within its essence contradictions that have yet to be satisfactorily resolved. First among these is the challenge of protecting the rights of minorities while honoring the will of the majority. From America's shameful treatment of its native tribes to current debates over the rights of undocumented workers; from Europe's recurring bouts of anti-Semitism to its recent struggles to integrate a fast-growing Muslim minority; the challenge of protecting the politically disenfranchised is a problem that has long tormented democratic societies around the world. And there are new challenges. How, for example, can democratic

societies protect themselves from the threat of terrorism without trampling upon civil liberties? How can they loosen the chains of special-interest gridlock in order to head off the risks of global climate change? Given these and other similarly vexing challenges, we must dare to hope that the practice of democracy will continue to evolve.

If democracy still has mountains to climb, some two-and-a-half thousand years after its birth in ancient Greece, it would be arrogant to assume that after a mere century of progress, modern management has exhausted its own evolutionary potential—just as it would be foolish to assume that a technology that served us so admirably during the 20th century will turn out to be equally well-suited to the demands of the 21st. The fact is, that despite its indisputable accomplishments to date, modern management has bequeathed to us a set of perplexing conundrums, troubling trade-offs that cry out for bold thinking and fresh approaches. And when we look forward, we are confronted by a slew of new problems—predicaments and dilemmas that lay bare the limits of our well-worn management systems and processes.

### Transcending Old Trade-offs

ver the course of its development, modern management has wrestled a lot of burly problems to the ground—it has succeeded in breaking complex tasks into small, repeatable steps, in enforcing adherence to standard operating procedures, in measuring costs and profits to the penny, in coordinating the efforts of tens of thousands of employees, and in synchronizing operations on a global scale. Yet these successes have come at a heavy price. The machinery of modern management gets fractious, opinionated, and free-spirited human beings to conform to standards and rules, but in so doing it squanders prodigious quantities of human imagination and initiative. It brings discipline to operations, but imperils organizational adaptability. It multiplies the purchasing power of consumers the world over, but also enslaves mil-

lions in quasi-feudal, top-down organizations. And while modern management has helped to make businesses dramatically more efficient, there's little evidence that it has made them more ethical.

Modern management has given much, but it has taken much in return, and it continues to take. Perhaps it's time to renegotiate the bargain. We must learn how to coordinate the efforts of thousands of individuals without creating a burdensome hierarchy of overseers; to keep a tight rein on costs without strangling human imagination; and to build organizations where discipline and freedom aren't mutually exclusive. In this new century, we must strive to transcend the seemingly unavoidable trade-offs that have been the unhappy legacy of modern management.

#### Surmounting New Challenges

hile the practice of management may not be evolving as fast as it once did, the environment that faces 21st-century businesses is more volatile than ever. This new century may still be young, but it has already spawned a sizable brood of daunting management challenges that are markedly different from the ones that taxed our forebears:

- As the pace of change accelerates, more and more companies are finding themselves on the wrong side of the change curve. Recent research by L. G. Thomas and Richard D'Aveni² suggests that industry leadership is changing hands more frequently, and competitive advantage is eroding more rapidly, than ever before. Today, it's not just the occasional company that gets caught out by the future, but entire industries—be it traditional airlines, old-line department stores, network television broadcasters, the big drug companies, America's carmakers, or the newspaper and music industries.
- Deregulation, along with the de-scaling effects of new technology, are dramatically reducing the barriers to entry across a wide

range of industries, from publishing to telecommunications to banking to airlines. As a result, long-standing oligopolies are fracturing and competitive "anarchy" is on the rise.

- Increasingly, companies are finding themselves enmeshed in "value webs" and "ecosystems" over which they have only partial control. As a result, competitive outcomes are becoming less the product of market power, and more the product of artful negotiation. De-verticalization, disintermediation, and outsourcing, along with the growth of codevelopment projects and industry consortia, are leaving firms with less and less control over their own destinies.
- The digitization of anything not nailed down threatens companies that make their living out of creating and selling intellectual property. Drug companies, film studios, publishers, and fashion designers are all struggling to adapt to a world where information and ideas "want to be free."
- The Internet is rapidly shifting bargaining power from producers to consumers. In the past, customer "loyalty" was often an artifact of high search costs and limited information, and companies frequently profited from customer ignorance. Today, customers are in control as never before—and in a world of near-perfect information, there is less and less room for mediocre products and services.
- Strategy life cycles are shrinking. Thanks to plentiful capital, the power of outsourcing, and the global reach of the Web, it's possible to ramp up a new business faster than ever before. But the more rapidly a business grows, the sooner it fulfills the promise of its original business model, peaks, and enters its dotage. Today, the parabola of success is often a short, sharp spike.
- Plummeting communication costs and globalization are opening up industries to a horde of new, ultra-low-cost competitors. These

new entrants are eager to exploit the legacy costs of the old guard. While some veterans will join the "race to the bottom" and move their core activities to the world's lowest-cost locations, many others will find it difficult to reconfigure their global operations. As Indian companies suck in service jobs and China steadily expands its share of global manufacturing, companies everywhere else will struggle to maintain their margins.

These new realities call for new organizational and managerial capabilities. To thrive in an increasingly disruptive world, companies must become as strategically adaptable as they are operationally efficient. To safeguard their margins, they must become gushers of rule-breaking innovation. And if they're going to out-invent and outthink a growing mob of upstarts, they must learn how to inspire their employees to give the very best of themselves every day. These are the challenges that must be addressed by 21st-century management innovators.

#### Limited by Our DNA

If you've spent any time inside large organizations, you know that expecting them to be strategically nimble, restlessly innovative, or highly engaging places to work—or anything else than merely efficient—is like expecting a dog to do the tango. Dogs are quadrupeds. Dancing isn't in their DNA. So it is with corporations. Their managerial DNA makes some things easy and others virtually impossible. Reengineering, cost-cutting, continuous improvement, outsourcing, and offshoring: these things are entirely consistent with the genetic proclivities of large companies. They're all about better, faster, quicker, and cheaper—the corporate equivalent of dogs chasing cats and peeing on lampposts. Unfortunately, though, resolving some of modern management's more odious trade-offs, and coping with tomorrow's disorienting discontinuities, is going to require something more akin to gene replacement therapy. Let me explain.

Modern management isn't just a suite of useful tools and techniques; it is a *paradigm*, to borrow a sound bite from Thomas Kuhn's overused argot. A paradigm is more than a way of thinking—it's a worldview, a broadly and deeply held belief about what types of problems are worth solving, or are even solvable. Listen to Kuhn on this point: "[A] paradigm is a criterion for choosing problems that . . . can be assumed to have solutions. To a great extent these are the only problems that the community will . . . encourage its members to undertake. Other problems . . . are rejected as metaphysical . . . or sometimes as just too problematic to be worth the time. A paradigm can, for that matter, even insulate the community from those socially important problems that are not reducible to the [familiar] puzzle form because they cannot be stated in terms of the conceptual and instrumental tools which the paradigm provides."<sup>3</sup>

We are all prisoners of our paradigms. And as *managers*, we are captives of a paradigm that places the pursuit of efficiency ahead of every other goal. This is hardly surprising, since modern management was invented to solve the problem of *inefficiency*. A bit of history will help to underline the significance of this point.

While it's impossible to precisely date the genesis of modern management, most historians locate Frederick Winslow Taylor near the beginning of the epic, and regard him as the most influential management innovator of the 20th century. Taylor believed that an empirical, data-driven approach to the design of work would yield big productivity gains. As the father of "scientific management," Taylor battled against wasted motion, poorly designed tasks, lax or unrealistic performance standards, misfits between job requirements and worker capabilities, and incentive systems that discouraged best efforts—adversaries that any 21st-century manager would instantly recognize.

Taylor maintained that efficiency came from "knowing exactly what you want men to do, and then seeing that they do it in the best and cheapest way." <sup>4</sup> He believed that management could be made a "true science, resting upon clearly defined laws, rules and principles as a

foundation."<sup>5</sup> For Taylor, as for every economy-minded CEO and efficiency-peddling consultant since, the secret to increased productivity lay in "systematic management."<sup>6</sup> Indeed, one can imagine Taylor looking down from his well-ordered heaven and smiling fondly at the Six Sigma acolytes who continue to spread his gospel. (His only surprise might be that 21st-century managers are still obsessing over the same problems that occupied his inventive mind a hundred years earlier.)

Taylor's contribution to economic progress, and that of management more generally, is evidenced by more than a hundred years of ever-increasing factory productivity. Between 1890 and 1958, for example, U.S. manufacturing output per labor hour grew nearly fivefold; and has continued to rise ever since. Concomitant with this rise in productivity, though, came an increase in bureaucratization. How else could one accomplish Taylor's goal of mechanizing labor but by building up a bureaucracy, with its standardized routines, tightly drawn job descriptions, cascading objectives, and hierarchical reporting structures?

Max Weber, the renowned German sociologist and a contemporary of Taylor, viewed bureaucracy as the pinnacle of social organization: "Experience tends universally to show that the purely bureaucratic type of administrative organization . . . is, from a purely technical point of view, capable of attaining the highest degree of efficiency and is in this sense formally the most rational known means of carrying out imperative control over human beings. It is superior to any other form in precision, in stability, in the stringency of its discipline, and in its reliability. It thus makes possible a particularly high degree of calculability of results for the heads of the organization and for those acting in relation to it."

#### Weber's ideal organization had several distinguishing features:

- The division of labor and responsibilities were clearly delineated for every member of the organization.
- Positions were organized into a hierarchy resulting in a scale of authority.

- Members were selected for positions based on their technical competence or education.
- Managers worked for the owners of the enterprise, but were not the primary owners themselves.
- Everyone in the organization was subject to strict rules and controls relevant to their particular job. The rules were impersonal and uniformly applied.<sup>8</sup>

There is little here that would surprise a 21st-century manager. And though Max Weber has been dead for nearly 90 years, control, precision, stability, discipline, and reliability—the traits he saluted in his anthem to bureaucracy—are still the canonical virtues of modern management. While we may deplore "bureaucracy," it still constitutes the organizing principle for virtually every commercial and public-sector organization in the world, yours included. And while progressive managers may work hard to ameliorate its stultifying effects, there are few who can imagine a root-and-branch alternative.

So here we are: still working on Taylor-type puzzles and living in Weber-type organizations. To be fair, many of the 21st century's new management challenges have been acknowledged in boardrooms and executive suites, and here and there one finds a truly serious attempt at management innovation (some of which will be described in the chapters that follow). Yet our progress to date has been constrained by our efficiency-centric, bureaucracy-based managerial paradigm. Most of us are still thinking like dogs.

#### The Revolutionary Imperative

So we improvise and we patch and we retrofit. We create innovation projects and units, instead of organizations that are innovative from top to bottom. We call our employees "associates" and "team

members," but don't dramatically enlarge the scope of their discretionary authority. We encourage people to welcome change but resist embracing the principles of grassroots activism. We talk about a meritocracy, but balk at the notion of a 360-degree compensation process.

Truth is, most of us are partisans of the old paradigm. We're members of the *bureaucratic class*. As executives, managers, and supervisors, we've learned how to use the technology of management—the planning conferences, the budget meetings, and the performance measurement systems—to get things done. More importantly, we've learned how to leverage our positional prerogatives, our access to power and our polished professionalism, to get ahead. Talk about revolution—particularly *management* revolution—makes us jittery. Who, one wonders, will come out on top if the rules and roles of management get turned upside down?

Yet despite our reservations, we know that Kuhn's central thesis is incontestable: real progress demands a revolution. You can't shuffle your way onto the next S-curve. You have to leap. You have to vault over your preconceived notions, over everyone else's best practices, over the advice of all the experts, and over your own doubts. As we'll see, you don't have to leap with hundreds of millions of dollars on the line, or with your career dangling precariously out of your pocket. You don't have to leap with no sense of where you're going to land. But you do have to leap—at least with your imagination.

Taylor understood that management breakthroughs require intellectual long jumps. In 1912, 50 years before Kuhn's landmark volume, Taylor appeared in front of a congressional committee and argued that scientific management required nothing less than a mental revolution:

Now, in its essence, scientific management involves a complete mental revolution on the part of the workingman engaged in any particular establishment or industry—a complete mental revolution on the part of these men as to their duties toward their work, toward their fellow men, and toward their employers. And it involves the equally complete mental revolution on the part of those on the management's side—the foreman, the superintendent, the owner of the business, the board of directors—a complete mental revolution on their part as to the duties toward their fellow workers in the management, toward their workmen, and toward all of their daily problems. And without this complete mental revolution on both sides scientific management does not exist.<sup>9</sup>

Like other heralds of the future, Taylor may have gone a bit overboard with his revolutionary rhetoric, but few of his contemporaries would have challenged his assertion that scientific management represented a startling break with precedent.

Consider: in 1890 the average company in the United States had four employees, and few had more than a couple of hundred workers. Had you been alive at the time, it would have been hard to imagine that a company could ever grow to the scale of U.S. Steel, which, after its acquisition of Carnegie Steel in 1901, became the world's first company with a billion-dollar market value. It would have been nearly impossible to believe that a business founded in 1903—the Ford Motor Company—would be turning out more than half a million cars per year a decade later. And it would have been equally hard to foresee all of the underlying management breakthroughs that would come together to make all this possible.

Could the practice of management change as radically over the first two or three decades of *this* century as it did during the early years of the 20th century? I believe so. More than that, I believe we must *make* it so. The challenges facing 21st-century business leaders are at least as intimidating, exciting, and unprecedented as those that confronted the world's industrial pioneers a hundred years ago. Sure, we're bound by precedent, and most of us have a vested interest in the management status quo. But if human beings could invent the modern industrial organization, then they can reinvent it.

Admittedly, there's not much in the average MBA curriculum, management best seller, or leadership development program that would suggest there are radical alternatives to the way we lead, plan, organize, motivate, and manage right now. But true innovators are never bound by what is; instead they dream of what could be. Hence the goal of this book: to help you and your colleagues first imagine, and then invent, the future of management.