

The End of Management?</ch>

What 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 progressive companies from their retrograde rivals? 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 or measure performance?

In short, 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 how managers do what they do? Don't be dismayed if the answer is "no." Given how little the practice of management has changed over the past few decades, it's hardly surprising that most people have a hard time imagining how management in the 21st century could be substantially different from management in the 20th century.

A maturing technology. When compared to the dramatic changes that have been witnessed over the past half-century in technology, lifestyles, demographics 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 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 and routines little changed from those which governed corporate life a generation or two ago. Hierarchies may have gotten flatter, but they haven't disappeared. Front line employees may be smarter and better trained, but they're still expected to line up obediently behind executive decisions. Middle managers are still appointed by senior managers. Strategy is still 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, setting objectives, laying out plans, and minimizing deviations from the norm. Maybe most of the really tough management problems have already been cracked.

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, an alumnus of the Santa Fe Institute and a gifted biologist, has used the notion of a “fitness landscape” to describe the limits of evolutionary progress.ⁱ In Kauffman's allegorical mountain range, higher peaks represent higher levels of evolutionary accomplishment. As a species adapts and changes, it climbs higher and higher in the fitness landscape. In the beginning, starting from a deep valley, every track leads upwards. But as the species ascends, the percentage of terrain that lies above it steadily dwindles. Over time, there are fewer and fewer evolutionary paths that lead up and ever more that lead down. As a result, the pace of evolution slows. In an expansive fitness landscape, that is, one with many possible evolutionary pathways, it is unlikely that a particular species will ever find its way to the top of K2 or Kanchenjunga. Instead, its meandering journey is more likely to 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. After having evolved rapidly in the first half of the 20th century, the “technology” of management has reached a local peak. In this view, modern management is not perched atop some Everest of

accomplishment but is, instead, sitting on a modest mound in the Appalachians—Mount Love, let's say. While you can 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 modern management short. If you have a couple of cars in the garage, a television in every room and a digital device in every pocket, you can thank 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 steam engine to gene splicing, 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 invention into global prosperity.

Indeed, one could argue that the machinery of modern management—variance analysis, capital budgeting, project management, employee assessment, 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 stands in the aisle of an up-scale supermarket mulling twenty varieties of Balsamic vinegar; the blue-collar household with two cars in the garage and a TV in every room—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 prophets and apostles of modern management.

Yet every great invention, management included, sits on an S-curve, and is traversing a road that leads from birth to senescence. The dynamics of this process mirror those of Kaufmann's evolutionary hike. New inventions, like Gottlieb Daimler's gas-powered buggy, which debuted in 1886, typically get off to a slow start. At the beginning, there are dozens of technical challenges that bedevil developers and curtail progress. As these

initial hurdles are surmounted, the pace of improvement begins to accelerate. Knowledge compounds and soon whole clusters of innovation are redefining what's possible. Inevitably, though, the law of diminishing returns kicks in at some point and 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 not long after the end of the American Civil War. These intrepid pioneers developed standardized job descriptions and work methods. They invented elaborate processes for production planning and scheduling. They mastered the intricacies of cost accounting and profit analysis. They set up exception-based reporting systems and developed detailed financial controls. They devised incentive-based compensation schemes and established primitive personnel departments. They built sophisticated systems for capital budgeting. And by 1930 they had also designed the basic architecture of the multi-divisional organization and enumerated the principles of brand management.

Now think back over the last twenty or thirty 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, management 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 S-curve, 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 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 we have yet to satisfactorily resolve. 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 conundrum that continues to bedevil democracies. And then there are new challenges. How, for example, does one safeguard civil liberties in a world made unsafe by the ever-present threat of terrorism?

Could the same be true for management? Are there troubling and perennial conundrums that after all these years still have yet to be resolved? Are there new problems looming on the horizon that will demand entirely new management approaches? I believe one can answer yes while still acknowledging management's indisputable accomplishments to date.

Transcending old trade-offs. Over 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 conformance to standard operating procedures, in figuring out how to measure costs and profits to the penny, in coordinating the efforts of tens of thousands of employees, and in managing 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 it squanders prodigious quantities of human imagination and initiative. It brings discipline to operations, but imperils adaptability. It helps to multiply the world's purchasing power, but it also enslaves millions in quasi-feudal, top-down, organizations. And while the techniques of modern management have 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. Now it's time to renegotiate the bargain. We must figure out a way to coordinate the efforts of thousands of individuals without creating a burdensome hierarchy of overseers.; to build companies that liberate human imagination while keeping a tight rein on costs; and to invent 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. While the practice of management may not be evolving as fast as it once did, the competitive and market conditions faced by businesses large and small are more volatile than ever. The new century may still be young, but it has already spawned a sizable brood of daunting management challenges that are very different from the ones that taxed our forebears:

- E 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'Aveniⁱⁱ suggests that industry leadership is changing hands more frequently, and competitive advantages are eroding more rapidly, than ever before. Today, it's not just the odd company, but entire industries that get caught out by the future—be it the traditional airline industry, old line department stores, network television, the big drug companies, America's carmakers, or the newspaper and music industries.
- E De-regulation and 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.

- E Increasingly, companies are finding themselves enmeshed in “value webs” and “ecosystems” over which they have only limited control. As a result, competitive outcomes are becoming less the product of market power, and more the result of artful negotiation. De-verticalization, disintermediation and outsourcing, along with the growth of co-development projects and industry consortia, are leaving firms with less and less control over their own destinies.
- E The digitization of just about everything threatens any company that makes a living out of creating and selling intellectual property. Drug companies, film studios, publishers and luxury goods manufacturers are all struggling to adapt to a world where information and ideas “want to be free.”
- E 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 often profited from customer ignorance. No more. 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.
- E 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 strategy, peaks, and enters its dotage. More and more, the parabola of success looks like a spike.
- E Plummeting communication costs and globalization are opening up many 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 bottom” and move their core activities to the world’s lowest cost locations, many others will find it difficult to rapidly reconfigure their global workforce. 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.

To cope with these new realities, companies will need to build new organizational and managerial capabilities. To thrive in an increasingly disruptive world, big companies will need to become as strategically adaptable as they are operationally efficient. To safeguard their margins, they will need to become gushers of rule-breaking innovation. And if they’re going to out-invent and out-think a growing mob of upstarts, they will need to be capable of inspiring their employees to give the very best of themselves every day. Therein lies the challenge for 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, or 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. Re-engineering, 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 is more than 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.ⁱⁱⁱ

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 hard to 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’s enemies were 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.”^{iv} He believed that management could be made a “true science, resting upon clearly defined laws, rules and principles as a foundation.”^v For Taylor, as for every economy-minded CEO and efficiency-peddling consultant since, the secret to increased productivity lay in “systematic management.”^{vi} 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 attested to by more than a hundred years of ever-increasing factor productivity. Between 1890 and 1958, for example, US manufacturing output per labor hour grew nearly five-fold; and it has continued to rise ever since. Concomitant with this rise in productivity, though, has come 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?

Enter Max Weber, the renowned German sociologist and a contemporary of Taylor. To Weber, a bureaucracy represented 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.^{vii}

Weber's ideal organization had several distinguishing features:

- E The division of labor and responsibilities were clearly delineated for every member of the organization.
- E Positions were organized into a hierarchy resulting in a scale of authority.
- E Members were selected for positions based on their technical competence or education.

- E Managers worked for the owners of the enterprise, but were not the primary owners themselves.
- E Everyone in the organization was subject to strict rules and controls relevant to their particular job. The rules were impersonal and uniformly applied.^{viii}

There is little here that would surprise a 21st century manager. And though Max Weber has been dead for nearly ninety 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 puzzles 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 grass-roots 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*. We’re 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 use 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 are 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 breakthroughs require intellectual long jumps. In 1912, fifty 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 mention revolution on their part as 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.

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 US 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 grow to the scale of US 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 annually a decade later. And it would have been equally hard to foresee all of the underlying management breakthroughs that would ultimately come together to make 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 adolescence 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, they can, and they must, reinvent it. Admittedly, there's not much in the average MBA curriculum, management bestseller, 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 to first imagine, and then invent, the future of management.

Notes:

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- i Stuart Kauffman, *At Home In the Universe*, Oxford University Press, 1995, pp. 149-190.
- ii L.G. Thomas and Richard D'Aveni, "The Rise of Hypercompetition from 1950 to 2002, Evidence of Increasing Structural Destabilization and Temporary Competitive Advantage," 2004, Unpublished manuscript.
- iii Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 3d edition. Chicago: University of Chicago Press, 1996, p. 37.
- iv Frederick W. Taylor, *Shop Management*, New York: Harper and Row, 1903, p. 3.
- v Frederick W. Taylor, *The Principles of Scientific Management*, New York: Harper and Row, 1911, p. 7.
- vi *Ibid.*
- vii Max Webber, (A.M. Henderson and Talcott Parsons, ed. and trans.), *The Theory of Social and Economic Organization*, New York: Free Press, 1947, p. 337.
- viii Summarized in Wren, *The History of Management Thought*, p. 228.
- ix Hearings before Special Committee of the House of Representatives to Investigate the Taylor and Other Systems of Shop Management under Authority of House Resolution 90. Washington D.C.: US Government Printing Office, 1912, p. 1387.