Over the past century, breakthroughs such as brand management and the divisionalized organization structure have created more sustained competitive advantage than anything that came out of a lab or focus group. Here’s how you can make your company a serial management innovator.

The Why, What, and How of Management Innovation

by Gary Hamel

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The Idea in Brief

Breakthroughs in your company’s management processes—such as creation of intellectual property, brand building, talent development—deliver potent competitive advantages. By perfecting the industrial research laboratory, for example, General Electric won more patents than any other U.S. company. And by revolutionizing brand management, Procter & Gamble created a product portfolio that scores $1 billion in sales annually.

Yet most companies focus their innovation efforts on developing new offerings or achieving operational efficiencies—gains competitors quickly copy. To stay ahead of rivals, you must become a serial management innovator, systematically seeking breakthroughs in how your company executes crucial managerial processes.

The keys to serial management innovation? Tackle a big problem—as General Motors did by inventing the divisional structure to bring order to its sprawling family of companies. Search for radical management principles—as Visa’s founders did when they envisioned self-organization—and created the first non-stock, for-profit membership enterprise. Challenge conventional management beliefs, which Toyota did by deciding that frontline employees—not top executives—make the best process innovators.

You can’t afford to let rivals beat you to the next great management breakthrough. By becoming a serial management innovator, you cross new performance thresholds—and sustain your competitive edge.

The Idea in Practice

To become a serial management innovator:

Commit to a Big Problem

The bigger the problem you’re facing, the bigger the innovation opportunity. To identify meaty problems, ask:

• What tough trade-offs do we never get right? For example, does obsessive pursuit of short-term earnings undermine our willingness to invest in new ideas? Is our organization growing less agile while pursuing size and scale advantages? What other “either/or’s” can we turn into “and’s”?

• What is our organization bad at? For instance, do we have trouble changing before we’re forced to? Unleashing first-line employees’ imaginations? Creating an inspiring work environment? Ensuring that bureaucracy doesn’t smother innovation? Imagine a “can’t do” that you can turn into a “can do.”

• What challenges will the future hold for us? For example, what are the ramifications of escalating consumer power? Near-instant commoditization of products? Ultra low-cost rivals?

Challenge Your Management Orthodoxies

Conventional wisdom often obstructs innovation. Ask your colleagues what they believe about a critical management issue. Identify beliefs held in common. Then ask if these beliefs inhibit your ability to tackle the big problem you’ve identified. If so, consider alternative assumptions that could open the door to fresh insights.

Example:

In your firm, common beliefs about change might include “change must start at the top.” But this belief may be toxic to your organization. Why? It makes employees assume that they can’t influence the company’s business model or strategy. Thus they withhold their full engagement and passion—essential ingredients for continual organizational renewal. A more helpful alternative belief? “Change must start everywhere in our organization.”

Exploit the Power of Analogy

Identify decidedly unconventional organizations, and look for the practices they apply that might help you solve your problem.

Example:

If you seek ideas for funding ordinary employees’ glimmer-in-the-eye projects, study Bangladesh’s Grameen Bank. It makes micro-loans to poor people with no collateral requirement and little paperwork. Borrowers—which by 2004 numbered more than 4 million—use the funds to start small businesses that benefit themselves and their communities. Ask: How can we make it equally easy for our employees to get capital to fund an idea?
Over the past century, breakthroughs such as brand management and the divisionalized organization structure have created more sustained competitive advantage than anything that came out of a lab or focus group. Here’s how you can make your company a serial management innovator.

The Why, What, and How of Management Innovation

by Gary Hamel

Are you a management innovator? Have you discovered entirely new ways to organize, lead, coordinate, or motivate? Is your company a management pioneer? Has it invented novel approaches to management that are the envy of its competitors?

Does it matter? It sure does. Innovation in management principles and processes can create long-lasting advantage and produce dramatic shifts in competitive position. Over the past 100 years, management innovation, more than any other kind of innovation, has allowed companies to cross new performance thresholds.

Yet strangely enough, few companies have a well-honed process for continuous management innovation. Most businesses have a formal methodology for product innovation, and many have R&D groups that explore the frontiers of science. Virtually every organization on the planet has in recent years worked systematically to reinvent its business processes for the sake of speed and efficiency. How odd, then, that so few companies apply a similar degree of diligence to the kind of innovation that matters most: management innovation.

Why is management innovation so vital? What makes it different from other kinds of innovation? How can you and your company become blue-ribbon management innovators? Let’s start with the why.

Why Management Innovation Matters


• In the early 1900s, General Electric perfected Thomas Edison’s most notable invention, the industrial research laboratory. GE brought management discipline to the chaotic process of scientific discovery and, over the next 50 years, won more patents than any other company in America. Much of GE’s current competitive prowess can be traced to that extraordinary accomplishment.
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• DuPont played a pioneering role in the development of capital-budgeting techniques when it initiated the use of return on investment calculations in 1903. A few years later, the company also developed a standardized way of comparing the performance of its numerous product departments. These innovations, among others, helped DuPont become one of America’s industrial giants.

• Procter & Gamble’s preeminence in the packaged goods industry has its roots in the early 1930s, when the company began to formalize its approach to brand management. In the decades since, P&G has steadily built upon its early success in creating value out of intangible assets. P&G’s product portfolio includes 16 brands that have produced $1 billion-plus in sales every year.

• Visa, the world’s first near-virtual company, owes its success to organizational innovation. When Visa’s founder banks formed a consortium in the United States in the early 1970s, they laid the groundwork for one of the world’s most ubiquitous brands. Today, Visa is a global financial web that links more than 21,000 financial institutions and more than 1.3 billion cardholders.

• Linux, the computer operating system, is the best-known example of a recent management innovation: open source development. Based on other innovations like the general public license and online collaboration tools, open source development has proved to be a highly effective mechanism for eliciting and coordinating the efforts of geographically dispersed individuals.

As these examples show, a management breakthrough can deliver a potent advantage to the innovating company and produce a seismic shift in industry leadership. Technology and product innovation, by comparison, tend to deliver small-caliber advantages.

A management innovation creates long-lasting advantage when it meets one or more of three conditions: The innovation is based on a novel principle that challenges management orthodoxy; it is systemic, encompassing a range of processes and methods; and it is part of an ongoing program of invention, where progress compounds over time. Three brief cases illustrate the ways in which management innovation can create enduring success.

Harnessing employee intellect at Toyota. Why has it taken America’s automobile manufacturers so long to narrow their efficiency gap with Toyota? In large part, because it took Detroit more than 20 years to ferret out the radical management principle at the heart of Toyota’s capacity for relentless improvement. Unlike its Western rivals, Toyota has long believed that first-line employees can be more than cogs in a soulless manufacturing machine; they can be problem solvers, innovators, and change agents. While American companies relied on staff experts to come up with process improvements, Toyota gave every employee the skills, the tools, and the permission to solve problems as they arose and to head off new problems before they occurred. The result: Year after year, Toyota has been able to get more out of its people than its competitors have been able to get out of theirs. Such is the power of management orthodoxy that it was only after American carmakers had exhausted every other explanation for Toyota’s success—an undervalued yen, a docile workforce, Japanese culture, superior automation—that they were finally able to admit that Toyota’s real advantage was its ability to harness the intellect of “ordinary” employees. As this example illustrates, management orthodoxies are often so deeply ingrained in executive thinking that they are nearly invisible and are so devoutly held that they are practically unassailable. The more unconventional the principle underlying a management innovation, the longer it will take competitors to respond. In some cases, the head-scratching can go on for decades.

Building a community at Whole Foods. It’s tough for rivals to replicate advantages based on a web of individual innovations spanning many management processes and practices. That’s one reason why no competitor has matched the performance of Whole Foods Market, which has grown during the past 25 years to 161 stores and $3.8 billion in annual sales. While other grocery chains have been slashing costs to fend off Wal-Mart, Whole Foods has been rapidly evolving an extraordinary retail model—one that already delivers the highest profits per square foot in the industry. What may not be obvious to health-conscious consumers and growth-loving investors is that the company’s management model is just as distinctive as its high-margin business model. John Mackey, the company’s founder and CEO, says his goal was to “create an organization based on love instead of fear” and de-
Analogies from atypical organizations that redefine what's possible

A deconstruction of management orthodoxies

Management principles, processes, and practices or a marked departure from traditional management. In most companies, management in-

novation is ad hoc and incremental. A systematic process for producing bold management breakthroughs must include

Commitment to a big management problem

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The Elements of Management Innovation

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scribes Whole Foods as a “community working together to create value for other people.” At Whole Foods, the basic organizational unit isn't the store but small teams that manage departments such as fresh produce, prepared foods, and seafood. Managers consult teams on all store-level decisions and grant them a degree of autonomy that is nearly unprecedented in retailing. Each team decides what to stock and can veto new hires. Bonuses are paid to teams, not to individuals, and team members have access to comprehensive financial data, including the details of every coworker’s compensation. Believing that 100:1 salary differentials are incompatible with the ethos of a community, the company has set a salary cap that limits any executive’s compensation to 14 times the company average. Just as startling is the fact that 94% of the company’s stock options have been granted to nonexecutives. What differentiates Whole Foods is not a single management process but a distinctive management system. Confronted by management innovation this comprehensive, rivals can do little more than shake their heads in wonder.

Growing great leaders at GE. Sometimes a company can create a sizable management advantage simply by being persistent. No company in the world is better at developing great managers than GE, even though many businesses have imitated elements of the company’s leadership development system, such as its dedicated training facility in Crotonville, New York, or its 360-degree feedback process.

In 1999, frustrated by chronically low levels of brand loyalty among appliance buyers, Dave Whitwam, Whirlpool’s then chairman and CEO, issued a challenge to his leadership team: Turn Whirlpool into a font of rule-breaking, customer-pleasing innovation. In 1999, frustrated by chronically low levels of brand loyalty among appliance buyers, Dave Whitwam, Whirlpool’s then chairman and CEO, issued a challenge to his leadership team: Turn Whirlpool into a font of rule-breaking, customer-pleasing innovation. In 1999, frustrated by chronically low levels of brand loyalty among appliance buyers, Dave Whitwam, Whirlpool’s then chairman and CEO, issued a challenge to his leadership team: Turn Whirlpool into a font of rule-breaking, customer-pleasing innovation. In 1999, frustrated by chronically low levels of brand loyalty among appliance buyers, Dave Whitwam, Whirlpool’s then chairman and CEO, issued a challenge to his leadership team: Turn Whirlpool into a font of rule-breaking, customer-pleasing innovation. In 1999, frustrated by chronically low levels of brand loyalty among appliance buyers, Dave Whitwam, Whirlpool’s then chairman and CEO, issued a challenge to his leadership team: Turn Whirlpool into a font of rule-breaking, customer-pleasing innovation. In 1999, frustrated by chronically low levels of brand loyalty among appliance buyers, Dave Whitwam, Whirlpool’s then chairman and CEO, issued a challenge to his leadership team: Turn Whirlpool into a font of rule-breaking, customer-pleasing innovation. In 1999, frustrated by chronically low levels of brand loyalty among appliance buyers, Dave Whitwam, Whirlpool’s then chairman and CEO, issued a challenge to his leadership team: Turn Whirlpool into a font of rule-breaking, customer-pleasing innovation. In 1999, frustrated by chronically low levels of brand loyalty among appliance buyers, Dave Whitwam, Whirlpool’s then chairman and CEO, issued a challenge to his leadership team: Turn Whirlpool into a font of rule-breaking, customer-pleasing innovation. In 1999, frustrated by chronically low levels of brand loyalty among appliance buyers, Dave Whitwam, Whirlpool’s then chairman and CEO, issued a challenge to his leadership team: Turn Whirlpool into a font of rule-breaking, customer-pleasing innovation. In 1999, frustrated by chronically low levels of brand loyalty among appliance buyers, Dave Whitwam, Whirlpool’s then chairman and CEO, issued a challenge to his leadership team: Turn Whirlpool into a font of rule-breaking, customer-pleasing innovation.

Not every management innovation creates competitive advantage, however. Innovation in whatever form follows a power law: For every extremely radical idea that delivers a big dollop of competitive advantage, there will be dozens of other ideas that prove to be less valuable. But that’s no excuse not to innovate. Innovation is always a numbers game; the more of it you do, the better your chances of reaping a fat payoff.

What Is Management Innovation?

A management innovation can be defined as a
Whirlpool’s leadership development programs;
• Setting aside a substantial share of capital spending every year for projects that meet a certain tough standard of innovativeness;
• Requiring every product development plan to contain a sizable component of new-to-market innovation;
• Training more than 600 innovation mentors charged with encouraging innovation throughout the company;
• Enrolling every salaried employee in an online course on business innovation;
• Establishing innovation as a large part of top management’s long-term bonus plan;
• Setting aside time in quarterly business review meetings for an in-depth discussion of each unit’s innovation performance;
• Building an innovation portal that grants Whirlpool’s employees all over the world access to a compendium of innovation tools and data on the company’s global innovation pipeline;
• Developing a set of metrics to track innovation inputs (such as the number of engineering hours devoted to innovative projects), throughputs (such as the number of new ideas entering the company’s innovation pipeline), and outputs (such as the pricing advantages gained from more-distinctive products and higher customer loyalty).

Whirlpool didn’t make all these changes at once, and there were plenty of false starts and detours along the way. (For more on how Whirlpool built its innovation engine, see “Change at Whirlpool Corporation,” Harvard Business School case nos. 705-462, 705-463, and 705-464.) Translating a novel management idea (like innovation from everyone, everywhere) into new and deeply rooted management practices requires a sustained and broad-based effort, but the payoff can be substantial. Jeff Fettig, Whirlpool’s current chairman, estimates that by 2007, the innovation program will add more than $500 million a year to the company’s top line.

How to Become a Management Innovator
I have yet to meet a senior executive who claims that his or her company has a praiseworthy process for management innovation. What’s missing, it seems, is a practical methodology. As with other types of innovation, the biggest challenge is generating truly novel ideas. While there is no sausage crank for innovation, it’s possible to increase the odds of a “Eureka!” moment by assembling the right ingredients. Some of the essential components are
• A bewitching problem that demands fresh thinking;
• Novel principles or paradigms that have the power to illuminate new approaches;
• A careful deconstruction of the conventions and dogma that constrain creative thinking;
• Examples and analogies that help redefine what’s possible.

Chunky problems. Fresh principles. Unorthodox thinking. Wisdom from the fringe. These multipliers of human creativity are as pivotal to management innovation as they are to every other kind of innovation. If you want to turn your company into a perpetual management innovator, here’s how you can get started.

Commit to a big problem. The bigger the problem, the bigger the opportunity for innovation. While big problems don’t always produce big breakthroughs, little problems never do. Nearly 80 years ago, General Motors invented the divisionalized organization structure in response to a seemingly intractable problem: how to bring order to the sprawling family of companies that had been assembled by William C. Durant, GM’s first president. Durant’s successor, Pierre Du Pont, who took charge in 1920, asked one of his senior associates, Alfred P. Sloan, Jr., to help simplify GM’s dysfunctional empire. Sloan’s solution: Establish a central executive committee charged with setting policy and exercising financial control, and set up operating divisions organized by products and brands, with responsibility for day-to-day operations. Thanks to this management innovation, GM was able to take advantage of its scale and scope. In 1931, with Sloan at the helm, GM finally overtook Ford to become the world’s largest carmaker.

It takes fortitude and perseverance, as well as imagination, to solve big problems. These qualities are most abundant when a problem is not only important but also inspiring. Frederick Winslow Taylor, arguably the most important management innovator of the twentieth century, is usually portrayed as a hard-nosed engineer, intent on mechanizing work and pushing employees to the max. Stern he may have been, but Taylor’s single-minded devotion

There is no sausage crank for innovation, but it’s possible to increase the odds of a “Eureka!” moment by assembling the right ingredients.
to efficiency stemmed from his conviction that it was iniquitous to waste an hour of human labor when a task could be redesigned to be performed with less effort.

This passion for multiplying the impact of human endeavor shines through in Taylor’s introduction to his 1911 opus, The Principles of Scientific Management: “We can see and feel the waste of material things. Awkward, inefficient, or ill-directed movements of men, however, leave nothing visible or tangible behind them. Their appreciation calls for an act of memory, an effort of the imagination. And for this reason, even though our daily loss from this source is greater than from our waste of material things, the one has stirred us deeply, while the other has moved us but little.”

To maximize the chances of a management breakthrough, you need to start with a problem that is both consequential and soul stirring. If you don’t have such a problem in mind, here are three leading questions that will stimulate your imagination.

First, what are the tough trade-offs that your company never seems to get right? Management innovation is often driven by the desire to transcend such trade-offs, which can appear to be irreconcilable. Open source development, for example, encompasses two antithetical ideas: radical decentralization and disciplined, large-scale project management. Perhaps you feel that the obsessive pursuit of short-term earnings undermines your company’s willingness to invest in new ideas. Maybe you believe that your organization has become less and less agile as it has pursued the advantages of size and scale. Your challenge is to find an opportunity to turn an “either/or” into an “and.”

Second, what are big organizations bad at? This question should produce a long list of incompetencies. Big companies aren’t very good at changing before they have to or responding to nimble upstarts. Most fail miserably when it comes to unleashing the imagination of first-line employees, creating an inspiring work environment, or ensuring that the blanket of bureaucracy doesn’t smother the flames of innovation. Push yourself to imagine a company can-do that you and your colleagues could turn into a can-do.

Third, what are the emerging challenges the future has in store for your company? Try to imagine them: An ever-accelerating pace of change. Rapidly escalating customer power. Near instant commoditization of products and services. Ultra-low-cost competitors. A new generation of consumers that is hype resistant and deeply cynical about big business. These discontinuities will demand management innovation as well as business model innovation. If you scan the horizon, you’re sure to see a tomorrow problem that your company should start tackling today.

Search for new principles. Any problem that is pervasive, persistent, or unprecedented is unlikely to be solved with hand-me-down principles. The pursuit of human liberty required America’s founders to embrace a new principle: representational democracy. More recently, scientists eager to understand the subatomic world have been forced to abandon the certainties of Newtonian physics for the more ambiguous principles of quantum mechanics. It’s no different with management innovation: Novel problems demand novel principles.

That was certainly true for Visa. By 1968, America’s credit card industry had splintered into a number of incompatible, bank-specific franchising systems. The ensuing chaos threatened the viability of the fledgling business. It was at a meeting to discuss this knotty problem that Dee Hock, a 38-year-old banker from Seattle, volunteered to lead an effort to resolve the industry’s biggest conundrum: how to build a system that would allow banks to cooperate in credit card branding and billing while still competing fiercely for consumers. Faced with this unprecedented challenge, Hock’s small team spent months coming up with a set of radical principles to guide their work:

- Power and function in the system must be distributed to the maximum degree possible.
- The system must be self-organizing.
- Governance must be distributed.
- The system must seamlessly blend both collaboration and competition.
- The system must be infinitely malleable, yet extremely durable.
- The system must be owned cooperatively and equitably.

These principles owed more to Hock’s fascination with Jeffersonian democracy and biological systems than to any management textbook. After two years of inventing, designing, and testing, Hock’s team brought forth Visa, the world’s first nonstock, for-profit membership organization—or, as Hock put it, an “orga-
organization whose product was coordination.”

It's hard to know if a management principle is really new unless you know which ones are strictly vintage. Modern management practice is based on a set of principles whose origins date back a century or more: specialization, standardization, planning and control, hierarchy, and the primacy of extrinsic rewards. Generations of managers have mined these principles for competitive advantage, and they have much to show for their efforts. But after decades of digging, the chance of discovering a gleaming nugget of new management wisdom in these well-explored caverns is remote. Your challenge is to uncover unconventional principles that open up new seams of management innovation. Your quest should begin with two simple questions: What things exhibit the attributes or capabilities that you'd like to build into your organization? And what is it that imbues those exemplars with their enviable qualities?

Let's suppose your goal is to make your company as nimble as change itself. You know that in a world of accelerating change, continuous strategic renewal is the only insurance against irrelevance. Moreover, you realize that all those management principles you've inherited from the Industrial Age make your company less, rather than more, adaptable. Specialization, for all its benefits, limits the kind of cross-boundary learning that generates breakthrough ideas. The quest for greater standardization often leads to an unhealthy affection for conformance; the new and wacky are seen as dangerous deviations from the norm. Elaborate planning-and-control systems lull executives into believing the environment is more predictable than it is. A disproportionate emphasis on monetary rewards leads managers to discount the power of volunteerism and self-organization as mechanisms for aligning individual effort. Deference to hierarchy and positional power tends to reinforce outmoded belief systems.

So where do you look to find the design principles for building a highly adaptable organization? You look to systems that have demonstrated their adaptability over decades, centuries, even aeons.

For more than 4 billion years, life has evolved at least as fast as its environment. That's quite a track record. Nature inoculates itself against the risks of environmental change by constantly creating new genetic material through sexual recombination and mutation. This bubbling fountain of genetic innovation is the key to nature's capacity for adaptation: The greater the diversity of the gene pool, the more likely it is that at least a few organisms will be able to survive in a dramatically altered landscape. Variety is one essential principle of adaptability.

Markets, too, are adaptable. Over the past 50 years, the New York Stock Exchange has outperformed virtually every one of its member companies. Competition is a hallmark of both markets and evolutionary biology. On the NYSE, companies compete to attract funds, and investors are free to place their bets as they see fit. Decision making is highly distributed, and investors are mostly unsentimental. As a result, markets are very efficient at reallocating resources from opportunities that are less promising to those that are more so. In most companies, however, there are rigidities that tend to perpetuate historical patterns of resource allocation. Executives, eager to defend their power, hoard capital and talent even when those resources could be better used elsewhere. Legacy programs seldom have to compete for resources against a plethora of exciting alternatives. The net result is that companies tend to overinvest in the past and underinvest in the future. Hence, competition and allocation flexibility are also important design principles if the goal is to build a highly adaptive organization.

Constitutional democracies rank high on any scale of evolvability. In a democracy, there is no monopoly on political action. Social campaigners, interest groups, think tanks, and ordinary citizens all have the chance to shape the legislative agenda and influence government policy. Whereas change in an autocratic regime comes in violent convulsions, change in a democracy is the product of many small, relatively gentle adjustments. If the goal is continuous, trauma-free renewal, most large corporations are still too much like monarchies and too little like democracies. With political power concentrated in the hands of a few dozen senior executives, and with little latitude for local experimentation, it's no wonder that big companies so often find themselves caught behind the change curve. To reduce the costs of change in your organization, you must embrace the principles of devolution and activism.
These management principles—variety, competition, allocation flexibility, devolution, and activism—stand in marked contrast to those we’ve inherited from the early decades of the Industrial Revolution. That doesn’t make the old principles wrong, but they are inadequate if the goal is continuous, preemptive strategic renewal.

Whatever big management challenge you choose to tackle, let it guide your search for new principles. For example, maybe your goal is to build a company that can prevail against the steadily strengthening forces of commoditization—a problem that certainly demands management innovation. It isn’t just products and services that are rapidly becoming commodities today but also broad business capabilities like low-cost manufacturing, customer support, product design, and human resource planning. Around the world, companies are outsourcing and offshoring business processes to vendors that provide more or less the same service to a number of competing firms. Businesses are collaborating across big chunks of the value chain, forming partnerships and joining industrywide consortia to share risks and reduce capital outlays. Add to this a worldwide army of consultants that has been working overtime to transfer best practices from the fast to the slow and from the smart to the not so clever. As once-distinctive capabilities become commodities, companies will have to wring a whole lot of competitive differentiation out of their ever-shrinking wedge of the overall business system.

Here’s the rub: It’s tough to build eye-popping differentiation out of lower-order human capabilities like obedience, diligence, and raw intelligence—things that are themselves becoming global commodities, available for next to nothing in places like Guangzhou, Bangalore, and Manila. To beat back the forces of commoditization, a company must be able to deliver the kind of unique customer value that can only be created by employees who bring a full measure of their initiative, imagination, and zeal to work every day. You can glimpse those higher-order capabilities in Apple’s sleek and sexy iPods, in IKEA’s cheap and cheerful furniture, in Porsche’s iconic sports cars, and in Pixar’s magical movies. The problem is, there’s little room in bureaucratic organizations for passion, ingenuity, and self-direction. The machinery of bureaucracy was invented in an age when human beings were seen as little more than semiprogrammable robots. Bureaucracy puts an upper limit on what individuals are allowed to bring to their jobs. If you want to build an organization that unshackles the human spirit, you’re going to need some decidedly unbureaucratic management principles.

Where do you find organizations in which people give all of themselves? You might start with Habitat for Humanity, which has built more than 150,000 homes for low-income families since 1976. Talk to some of the folks who’ve given up a weekend to pound nails and hang drywall. Share a beer with a few of the part-time hackers who have churned out millions of lines of code for the Linux operating system. Or consider all those volunteers who’ve helped make Wikipedia the world’s largest encyclopedia, with more than 1.8 mil-

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**Twelve Innovations That Shaped Modern Management**

Surprisingly, scholars have paid little attention to the process of management innovation. Seeking to correct this oversight, I have been working with Julian Birkinshaw and Michael Mol, both of the London Business School, to better understand the genesis of the twentieth century’s most important management innovations. First we identified 175 significant management innovations from 1900 to 2000. To whittle this list down to the most important advances, we evaluated each innovation along three dimensions: Was it a marked departure from previous management practices? Did it confer a competitive advantage on the pioneering company or companies? And could it be found in some form in organizations today? In light of these criteria, here are a dozen of the most noteworthy innovations.

1. Scientific management (time and motion studies)
2. Cost accounting and variance analysis
3. The commercial research laboratory (the industrialization of science)
4. ROI analysis and capital budgeting
5. Brand management
6. Large-scale project management
7. Divisionalization
8. Leadership development
9. Industry consortia (multicompany collaborative structures)
10. Radical decentralization (self-organization)
11. Formalized strategic analysis
12. Employee-driven problem solving

Important innovations that didn’t quite make this list include Skunk Works, account management, business process reengineering, and employee stock ownership plans. There are more recent innovations that appear quite promising, such as knowledge management, open source development, and internal markets, but it’s too early to assess their lasting impact on the practice of management.
lion articles. Each of these organizations is more of a community than a hierarchy. People are drawn to a community by a sense of shared purpose, not by economic need. In a community, the opportunity to contribute isn’t bounded by narrow job descriptions. Control is more peer based than boss based. Emotional satisfaction, rather than financial gain, drives commitment. For all those reasons, communities are amplifiers of human capability.

Whole Foods, you will remember, long ago embraced the notion of community as an overarching management principle. The company’s stores, sparkling temples of guilt-free gastronomy, are about as unlike the average Kroger or Safeway as one could imagine. That’s the kind of differentiation you get when your management system encourages team members to bring all their wonderful human qualities to work—and when your competitors’ management systems don’t.

Deconstruct your management orthodoxies. To fully appreciate the power of a new management principle, you must loosen the grip that precedent has on your imagination. While some of what you believe may be scientific certainty, much of it isn’t. Painful as it is to admit, a lot of what passes for management wisdom is unquestioned dogma masquerading as unquestionable truth.

How do you uncover management orthodoxies? Pull together a group of colleagues, and ask them what they believe about some critical management issue like change, leadership, or employee engagement. Once everyone’s beliefs are out on the table, identify those that are held in common. (More tools for identifying and challenging management orthodoxies are available at www.hamelfeb06.hbr.org.) For example, if the issue is strategic change, you may find that most of your colleagues believe that:

- Change must start at the top;
- It takes a crisis to provoke change;
- It takes a strong leader to change a big company;
- To lead change, you need a very clear agenda;
- People are mostly against change;
- With any change, there will always be winners and losers;
- You have to make change safe for people;
- Organizations can cope with only so much change.

Empirically, these beliefs seem true enough, but as a management innovator, you must be able to distinguish between what is apparently true and what is eternally true. Yes, big change initiatives like GE’s Six Sigma program typically require the support of an impassioned CEO. Yes, right-angle shifts in strategic direction, like Kodak’s embrace of all things digital, are usually precipitated by an earnings meltdown. And yes, just about every story of corporate renewal is a turnaround epic with the new CEO cast as corporate savior. But is this the only way the world can work? Why, you should ask, does it take a crisis to provoke deep change? For the simple reason that in most companies, a few senior executives have the first and last word on shifts in strategic direction. Hence, a tradition-bound management team, unwilling to surrender yesterday’s certainties, can hold hostage an entire organization’s capacity to embrace the future. So while it is true that it usually takes a crisis to motivate deep change, that isn’t some law of nature; it’s merely an artifact of a top-heavy distribution of political power.

As a management innovator, you must subject every management belief to two questions. First, is the belief toxic to the ultimate goal you’re trying to achieve? Second, can you imagine an alternative to the reality the belief reflects? Take the typical assumption that the CEO is responsible for setting strategy. While this seems a reasonable point of view, it may lull employees into believing that they can do little to influence their company’s strategic direction or to reshape its business model—that they are the implementers, rather than the creators, of strategy. Yet, if the goal is to accelerate the pace of strategic renewal or to fully engage the imagination and passion of every employee, a CEO-centric view of strategy formulation is unhelpful at best and dangerous at worst.

Is there any reason to believe we can challenge this well-entrenched orthodoxy? Sure. Look at Google. Its top team doesn’t spend a lot of time trying to cook up grand strategies. Instead, it works to create an environment that spawns lots of “Googlettes”: small, grassroots projects that may one day grow into valuable new products and services. Google looks for recruits who have off-the-wall hobbies and unconventional interests—people who aren’t afraid to defy conventional wisdom—and,
after it hires them, encourages them to spend up to 20% of their time working on whatever they feel will benefit Google’s users and advertisers. The company organizes much of its workforce into small, project-focused teams with only a modicum of supervision (one Google manager claimed to have 160 direct reports!) but with a lot of lateral communication and intramural competition. Its developers post their most-promising inventions on the Google Labs Web site, which gives adventurous users the chance to evaluate new concepts.

Few companies have worked as systematically as Google to broadly distribute the responsibility for strategic innovation. Its experience suggests that the conventional view of the CEO as the strategist in chief is just that: a convention. It’s not entirely wrong, but it’s a long way from being totally right. And when you hold other management maxims up to the bright light of critical examination, you are likely to find that many are equally flimsy. As old certainties crumble, the space for management innovation grows.

**Exploit the power of analogy.** Servant leadership. The power of diversity. Self-organizing teams. These are newfangled notions, right? Wrong. Each of those important management ideas was foreshadowed in the writings of Mary Parker Follett, a management innovator whose life was bracketed by the American Civil War and the Great Depression. Consider a few of the farsighted management tenets in Follett’s book, *Creative Experience*, first published in 1924:

Leadership is not defined by the exercise of power but by the capacity to increase the sense of power among those who are led. The most essential work of the leader is to create more leaders.

Adversarial, win-lose decision making is debilitating for all concerned. Contentious problems are best solved not by imposing a single point of view at the expense of all others but by striving for a higher-order solution that integrates the diverse perspectives of all relevant constituents.

A large organization is a collection of local communities. Individual and institutional growth are maximized when those communities are self-governing.

Follett’s heretical insights didn’t come from a survey of industrial best practice; they grew out of her experience in building and running Boston-based community associations. Vested with little formal authority and faced with the challenge of melding the competing interests of several fractious constituencies, Follett developed a set of beliefs about management that were starkly different from those that prevailed at the time. As is so often the case with innovation, a unique vantage point yielded unique insights.

If your goal is to escape the straitjacket of conventional management thinking, it helps to study the practices of organizations that are decidedly unconventional. With a bit of digging, you can unearth a menagerie of exotic organizational life-forms that look nothing like the usual doyens of best practice. Imagine, for instance, an enterprise that has more than 2 million members and only one criterion for joining: You have to want in. It has virtually no hierarchy, yet it spans the globe. Its world headquarters has fewer than 100 employees. Local leaders are elected, not appointed. There are neither plans nor budgets. There is a corporate mission but no detailed strategy or operating plans. Yet this organization delivers a complex service to millions of people and has thrived for more than 60 years. What is it? Alcoholics Anonymous. AA consists of thousands of small, self-organizing groups. Two simple admonitions inspire AA’s members: “Get sober” and “Help others.” Organizational cohesion comes from adherence to the 12-step program and observance of the 12 traditions that are outlined in the group’s operating principles. AA may have been around for decades, but it is still in the management vanguard.

Just how far can you push autonomy and self-direction in your company? Is there some set of simple rules that could simultaneously unleash local initiative and provide focus and discipline? Is there some meritorious goal that could spur volunteerism?

The example of Bangladesh’s Grameen Bank is another spur to inventive management thinking. The bank’s mission is to turn the poorest of the poor into entrepreneurs. To that end, it makes microloans to five-person syndicates with no requirement for collateral and little in the way of paperwork. Borrowers use the funds to start small businesses such as basket weaving, embroidery, transportation services, and poultry breeding. Ninety-five percent of the bank’s loans go to women, who have proven to be both creditworthy borrow-
ers and astute businesspeople. Microcredit gives these women the chance to improve their families’ well-being and their own social standing. As of 2004, Grameen Bank had provided funds to more than 4 million borrowers. Isn’t it a bit odd that a desperately poor woman in a developing country has an easier time getting capital to fund an idea than a first-level associate in your company? If Grameen Bank can make millions of unsecured loans to individuals who have no banking history, shouldn’t your company be able to find a way to fund the glimmer-in-the-eye projects of ordinary employees? Now, that would be a management innovation!

A final analogy: As I’m writing this, William Hill, one of the UK’s leading bookmakers, is offering odds of 3.5:1 “off” on Tiger Woods in the 2006 Masters golf tournament. That is, Woods is estimated to be three-and-a-half more times likely to lose than to win. The odds on Phil Mickelson are rather longer at 10:1, while Sergio Garcia’s chances are rated at 26:1. The odds are probability estimates based on two kinds of data: the expert judgment of odds compilers and the collective opinion of sports-mad punters laying down their bets. Having set an initial price on a particular outcome, bookmakers adjust the odds over time as people place additional bets and the wisdom of the crowd becomes more apparent.

What’s the lesson for would-be management innovators? Every day, companies bet millions of dollars on risky initiatives: new products, new ad campaigns, new factories, big mergers, and so on. History suggests that many projects will fail to deliver their expected returns. Is there a way of guarding against the hubris and optimism that so often inflate investment expectations? One potential solution would be to create a market for judgment that harnesses the wisdom of a broad cross section of employees to set the odds on a project’s anticipated returns. An executive sponsor would set the initial odds for a project to achieve a particular rate of return within a specific time frame. Let’s say those odds get set at 5:1 “on,” meaning that the sponsor believes there’s a five-to-one chance that the project will deliver the anticipated return. Employees would then be able to bet for or against that outcome. If many more employees bet against the project than for it, the sponsor would have to readjust the odds. While a CEO could still back a long-shot project, the transparency of the process would reduce the chance of investment decisions being overly influenced by the sponsor’s power or personal persuasiveness. Who would have thought that bookies could inspire management innovation? Your challenge is to hunt down equally unlikely analogies that suggest new ways of tackling thorny management problems.

Get the Rubber on the Road
OK, you’re inspired! You have some great ideas for management innovation. To turn your precedent-busting theories into reality, you need to understand exactly how your company’s existing management processes exacerbate that big problem you’re hoping to solve. Start by answering the following questions for each relevant management process:

- Who owns the process?
- Who has the power to change it?
- What are its objectives?
- What are the success metrics?
- Who are the customers of this process?
- Who gets to participate?
- What are the data or information inputs for this process?
- What analytical tools are used?
- What events and milestones drive this process?
- What kind of decisions does this process generate?
- What are the decision-making criteria?
- How are decisions communicated, and to whom?
- How does this process link to other management systems?

After documenting the details of each process, assemble a cross section of interested parties such as the process owner, regular participants, and anyone else who might have a relevant point of view. Ask them to assess the process in terms of its impact on the management challenge you’re seeking to address. For example, if the goal is to accelerate your company’s pace of strategic renewal, you may conclude that the existing capital approval process demands an unreasonably high degree of certainty about future returns even when the initial investment is very small. This frustrates the flexible reallocation of resources to new opportunities. You may find that your company’s strategic planning process is elitist in that it gives a disproportionate share of voice to se-
Senior executives at the expense of new ideas from people on the front lines. This severely limits the variety of strategic options your company considers. Perhaps the hiring process overweights technical competence and industry experience compared with lateral thinking and creativity. Other human resource processes may be too focused on ensuring compliance and not focused enough on emancipating employee initiative. The net result? Your company is earning a paltry return on its investment in human capital. A deep and systematic review of your firm’s management processes will reveal opportunities to reinvent them in ways that further your bold objectives.

Of course, you are unlikely to get permission to reinvent a core management process at one go, however toxic it may be. Like renowned social psychologist Elton Mayo, who some 80 years ago conducted human behavior experiments in the Hawthorne Works of the Western Electric Company, you’ll have to design low-risk trials that let you test your management innovations without disrupting the entire organization. That may mean designing a simulation, where you run a critical strategic issue through a novel decision-making process to see whether it produces a different decision. It may mean operating a new management process in parallel with the old process for a time. Maybe you’ll want to post your innovation on an internal Web site and invite people from across the company to evaluate and comment on your ideas before they’re put into practice. The goal is to build a portfolio of bold new management experiments that has the power to lift the performance of your company ever higher above its peers.

Most organizations around the world have been built on the same handful of time-tested management principles. Given that, it’s hardly surprising that core management processes like capital budgeting, strategic planning, and leadership development vary only slightly from one company to another. Although we sometimes affix the “dinosaur” label to chronically underperforming companies, the truth is that every organization has more than a bit of dinosaur DNA lurking in its management processes and practices. In the corporate ecosystem, there are little dinosaurs and big dinosaurs, rambunctious toddlers and tottering oldsters. But no company can escape the fact that with each passing year, the present is becoming a less reliable guide to the future. While there is much in the current management genome that will undoubtedly be valuable in the years ahead, there is also a great deal that will need to change. So far, management in the twenty-first century isn’t much different from management in the twentieth century. Therein lies the opportunity. You can wait for a competitor to stumble upon the next great management breakthrough, or you can become a management innovator right now. In a world swarming with new management challenges, you’ll need to be even more inventive and less tradition bound than all those management pioneers who came before you. If you succeed, your legacy of management innovation will be no less illustrious than theirs.

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The Why, What, and How of Management Innovation

Further Reading

ARTICLES

Deep Change: How Operational Innovation Can Transform Your Company
by Michael Hammer
Harvard Business Review Article
April 2004
Product no. R0404E

As you reinvent key managerial processes, also make operational innovations that support those reinvented processes. For example, Wal-Mart’s cross-docking distribution system and Dell’s build-to-order model have been central to these companies’ huge success in executing their strategies. Operational innovations defy conventional assumptions about how work should be done. Zero in on assumptions that interfere with achieving your strategic goal—then get rid of them. A hospital, for instance, began responding to physician referrals more quickly when it challenged the assumption that beds had to be assigned before patients could be accepted. Now it assigns beds after accepting patients—while the individuals are en route.

Building an Innovation Factory
by Andrew Hargadon and Robert I. Sutton
Harvard Business Review Article
May—June 2000
Product no. R00304

The authors describe a systematic method for innovating that you can apply on many fronts—including managerial processes. The keys? Capture good ideas by investigating multiple industries for proven management processes and learning how and why they work. Keep those ideas alive in your company by encouraging people to discuss them widely. Design your organization’s physical layout to get people talking constantly about their work and about how they might perform it better. And quickly translate promising ideas into new or reinvented managerial processes that you can test and improve.

Decoding the DNA of the Toyota Production System
by Steven J. Spear and H. Kent Bowen
Harvard Business Review Article
September—October 1999
Product no. 99509

The Toyota Production System (TPS) is a legendary example of breakthrough management innovation that has led to sustained competitive advantage. Using TPS, people throughout Toyota continually improve the processes required to carry out their work. They generate rules specifying how every activity should be performed. When they spot deviations from the specifications, they respond immediately with real-time experiments to either remove obstacles to following the specs or change the specs to improve work quality. Result? A disciplined yet flexible and creative community of scientists who continually push Toyota closer to its zero-defects, just-in-time, no-waste ideal.
Identifying management orthodoxies (1)

To innovate, you must surface and challenge your deeply held beliefs. The goal of this exercise is to help you identify management "orthodoxies" that may limit your creativity as a management innovator.

Table 1  Management Issues

Change: The why, what and how of strategic change.
Empowerment: The why, what and how of employee involvement.
Innovation: The why, what and how of business innovation.

Orthodoxy, *n.*: a belief or orientation agreeing with conventional standards.

<table>
<thead>
<tr>
<th>Column 1 Management Beliefs</th>
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<td>Selected management issue:</td>
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<th>Column 2 Shared Beliefs</th>
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Learning to Challenge Management Orthodoxy: Worksheet 1

1. Produce a 2-foot-by-3-foot copy of Worksheet 1 and 2. Produce additional copies if you anticipate having more than one team working on this exercise.
2. Place Worksheet 1 in the middle of a large table or on a wall adjacent to a large table. (Worksheet 2 will be used later).
3. Convene a team of 4–8 individuals around the table. (Multiple teams can work at multiple tables on additional copies of Worksheet 1).
4. Make sure you have a good supply of “sticky” notes (at least 10 notes per team member).
5. Pick a management issue from those identified in Table 1 on Worksheet 1. Write the name of this topic at the top of Column 1. (Pick an issue that is timely for your firm, or is relevant to some particular management challenge your firm is facing.)
6. As an individual, reflect on your “core beliefs” about the chosen issue. For example, if the issue is “change,” you may believe that “it takes a strong leader to change a large organization.”
7. Make a list of 4–5 core beliefs you hold relative to the management issue under consideration. Record each belief (no more than 10 words) on a sticky note. When finished, place your sticky notes (4–5) in Column 1.
8. Have one team member read all the stickies in turn. If the meaning of any note is unclear to a team member, he or she should ask the author for clarification.
9. Now, work as a team to identify clusters of similar beliefs. You may want to rearrange the stickies in Column 1 so that similar beliefs are together. You can draw a circle encompassing clusters of similar beliefs. The goal is to identify 5 core beliefs that a majority of the group hold in common concerning the particular management issue under consideration.
10. Record your 5 common beliefs in the appropriate spaces in Column 2 on Worksheet 1.
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<tr>
<th>Column 1</th>
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<th>Column 3</th>
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<td><strong>Shared Beliefs</strong>&lt;br&gt;1.</td>
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<td>Assumption:&lt;br&gt;How might you challenge this assumption (e.g. what is the &quot;unconventional alternative&quot; to the underlying assumption)?</td>
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<td>Assumption:&lt;br&gt;How might you challenge this assumption (e.g. what is the &quot;unconventional alternative&quot; to the underlying assumption)?</td>
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<td><strong>Underlying assumptions</strong>&lt;br&gt;1.</td>
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<td><strong>Counter Examples</strong>&lt;br&gt;1.</td>
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<td><strong>Unconventional alternatives</strong>&lt;br&gt;1.</td>
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Learning to Challenge Management Orthodoxy:
Worksheet 2

1. Continue with the team or teams you convened for the exercise around Worksheet 1.
2. Make sure you have a good supply of “sticky” notes (at least 30 notes per team member).
3. Place Worksheet 2 on your table. Take the 5 commonly held management beliefs that you listed in Column 2 on Worksheet 1 and write each belief in one of the five squares in Column 1 on Worksheet 2.
4. As an individual, think about the “underlying assumptions” to each of these commonly held beliefs. For example, some of the underlying assumptions to the belief that “it takes a strong leader to change a large organization,” might be: “change starts at the top,” “change is painful and most people prefer the status quo,” “a leader needs a very clear change agenda,” or, “to succeed, the leader has to ‘sell’ the change agenda to others in the organization.” As an individual, write down 2–3 underlying assumptions, one per sticky, for each management belief listed in Column 1 on Worksheet 2.
5. As a team, cluster similar underlying assumptions within Column 2. (Group similar stickies together). As a team, choose the one assumption (for each commonly held belief) that you think most deserves to be challenged. For example, you might decide that the assumption that “change is painful and most people prefer the status quo” deserves to be challenged. In choosing an assumption to challenge, team members may want to ask themselves what assumption, if challenged, would represent the greatest break with management orthodoxy. Having chosen an underlying assumption to challenge, circle the relevant sticky (or stickies). Within each of the five boxes in Column 2, draw a circle around the sticky or stickies that refer to the one assumption you think most deserves to be challenged.
6. As a team, think about each of the assumptions you circled in turn. For each assumption ask, can we think of any case or cases where this assumption has been proven invalid or hasn’t held true. For example, if the assumption is that “most people are against change,” you might ask, “can we think of examples where a large group of individuals have enthusiastically endorsed change?” The examples can be drawn from within your organization or without. Ask yourselves, what was it about this example that made it an exception to the general assumption? For example, maybe a group of people was deeply involved in developing a change agenda and, therefore, were more willing to embrace it eagerly. For each counter-example, try to find a key lesson or two and note each of these in Column 3.
7. As an individual, based on the insights listed in Column 3, and on your own imagination, think about what you company could do, practically, to successfully challenge each of the assumptions listed in Column 3. For each assumption, try to come up with one unconventional idea that might represent an alternative to conventional wisdom. For example, if one of the assumptions to be challenged is “change is painful and most people prefer the status quo,” you might suggest that “a company’s change agenda should be defined by employees, rather than being imposed upon them,” or “a company should create incentives for employees to champion and lead change” or “if employees were much better informed about the external environment, they would know when the status quo was unsustainable.” Write each of your assumption-defying alternatives (one per assumption) down on a sticky (not more than 10 words).
8. Have each team member read his or her alternatives from the stickies he or she posted in Column 4.
9. Finally, discuss ways in which you might turn each of your unconventional alternatives into management practice.