Deep Change
How Operational Innovation Can Transform Your Company
by Michael Hammer

Included with this full-text Harvard Business Review article:

1 Article Summary
   The Idea in Brief—*the core idea*
   The Idea in Practice—*putting the idea to work*

2 Deep Change: How Operational Innovation Can Transform Your Company

11 Further Reading
   A list of related materials, with annotations to guide further exploration of the article’s ideas and applications

Product 6573
Deep Change
How Operational Innovation Can Transform Your Company

The Idea in Brief

When struggling with stagnant growth—as many of us are today—do you look to acquisitions, aggressive marketing, or new technologies to rev up your revenues? If so, you may be missing a much more reliable way to outperform your competition—operational innovation.

Creating new ways, not just better ways, of working has been central to some of business's greatest success stories: think Wal-Mart's cross-docking distribution system, or Dell's build-to-order model. But since operations aren't sexy, most companies overlook them.

To set the stage for operational innovation in your company, first convince managers that it will work—show them successes at other companies or pockets of innovation in your own business. Concentrate on reinventing work processes that will have the greatest strategic impact. And, to ensure that your processes are truly innovative instead of just improved, set performance targets unreachable by standard operating procedures.

Operational innovations fuel extraordinary results. Progressive Insurance completely reinvented claims processing—slashing the waiting time for vehicle repair estimates from ten days to nine hours and catapulting sales from $1.3 billion in 1991 to $9.5 billion in 2002. Companies that bake operational innovation into their culture, as Progressive did, make competitors continually scramble to keep up.

The Idea in Practice

Time, cost, and customer satisfaction all get major boosts from operational innovations. Here are guidelines for reinventing your own work processes:

LOOK FOR ROLE MODELS OUTSIDE YOUR INDUSTRY.
Benchmarking within your own industry probably won't lead to breakthrough innovations. Instead, find operating techniques that have been successful in other industries and apply them to your business.

Example:
Taco Bell transformed its restaurant operations by thinking about them in manufacturing—not fast-food—terms. The chain outsourced production of key ingredients so it could focus on "assembly," not "fabrication," in its restaurants. The approach cut Taco Bell's costs and increased customer satisfaction by ensuring a consistently high-quality product.

IDENTIFY AND DEFY A CONSTRAINING ASSUMPTION.
Every operational innovation defies conventional assumptions about how work should be done. Zero in on the assumption that interferes with achieving your strategic goal and then get rid of it. A hospital, for instance, was able to respond to physician referrals more quickly when it challenged the assumption that beds had to be assigned before patients could be accepted. Now it assigns the bed after accepting the patient—while that person is en route.

Example:
In 2002, Shell Lubricants reconsidered who needed to participate in its order fulfillment process. By replacing a group of seven people who each handled different parts of the order with one person who does it all, Shell cut cycle time by 75%, reduced operating expenses by 45%, and boosted customer satisfaction by 105%.

RETHINK CRITICAL DIMENSIONS OF WORK.
Experiment with changing one or more of these elements in your own operations:

What results are to be produced, who should perform the necessary activities, where should they be performed, in what sequence, and how thoroughly each activity must be performed.

Example:
A packaged-goods maker had relied on sales forecasts for production scheduling. When demand for a new product wildly exceeded predictions, it created an ad hoc process to give real-time demand information to manufacturing, which made production planning and distribution more efficient. After the crisis passed, the company made its emergency mode standard. Customers were delighted, and overall costs dropped dramatically.
Breakthrough innovations in operations—not just steady improvement—can destroy competitors and shake up industries. Such advances don’t have to be as rare as they are.

Deep Change
How Operational Innovation Can Transform Your Company

by Michael Hammer

In 1991, Progressive Insurance, an automobile insurer based in Mayfield Village, Ohio, had approximately $1.3 billion in sales. By 2002, that figure had grown to $9.5 billion. What fashionable strategies did Progressive employ to achieve sevenfold growth in just over a decade? Was it positioned in a high-growth industry? Hardly. Auto insurance is a mature, 100-year-old industry that grows with GDP. Did it diversify into new businesses? No, Progressive’s business was and is overwhelmingly concentrated in consumer auto insurance. Did it go global? Again, no. Progressive operates only in the United States.

Neither did it grow through acquisitions or clever marketing schemes. For years, Progressive did little advertising, and some of its campaigns were notably unsuccessful. It didn’t unveil a slew of new products. Nor did it grow at the expense of its margins, even when it set low prices. The proof is Progressive’s combined ratio (expenses plus claims payouts, divided by premiums), the measure of financial performance in the insurance industry. Most auto insurers have combined ratios that fluctuate around 102%—that is, they run a 2% loss on their underwriting activities and recover the loss with investment income. By contrast, Progressive’s combined ratio fluctuates around 96%. The company’s growth has not only been dramatic—it is now the country’s third largest auto insurer—it has also been profitable.

The secret of Progressive’s success is maddeningly simple: It outoperated its competitors. By offering lower prices and better service than its rivals, it simply took their customers away. And what enabled Progressive to have better prices and service was operational innovation, the invention and deployment of new ways of doing work.

Operational innovation should not be confused with operational improvement or operational excellence. Those terms refer to achieving high performance via existing modes of operation: ensuring that work is done as it ought to be to reduce errors, costs, and delays but without fundamentally changing how that work gets accomplished. Operational innova-
tion means coming up with entirely new ways of filling orders, developing products, providing customer service, or doing any other activity that an enterprise performs.

Operational innovation has been central to some of the greatest success stories in recent business history, including Wal-Mart, Toyota, and Dell. Wal-Mart is now the largest organization in the world, and it owns one of the world's strongest brands. Between 1972 and 1992, Wal-Mart went from $4.4 million in sales to $44 billion, powering past Sears and Kmart with faster growth, higher profits, and lower prices. How did it score that hat trick? Wal-Mart pioneered a great many innovations in how it purchased and distributed goods. One of the best known of these is cross-docking, in which goods trucked to a distribution center from suppliers are immediately transferred to trucks bound for stores—without ever being placed into storage. Cross-docking and companion innovations led to lower inventory levels and lower operating costs, which Wal-Mart translated into lower prices. The rest is history. Although operational innovation wasn't the sole ingredient in Wal-Mart's success—its culture, strategy, human resource policies, and a host of other elements (including operational excellence) were also critical—it was the foundation on which the company was built.

Similar observations can be made about Dell and Toyota, organizations whose operational innovations have become proper nouns: the Dell Business Model and the Toyota Production System. Each of these three companies fundamentally rethought how to do work in its industry. Their operational innovations dislodged some of the mightiest corporations in the history of capitalism, including Sears, General Motors, and IBM.

These stories are well known for two reasons. First, the stories are worth telling: Operational innovations fuel extraordinary results. But the stories are also repeated because there are, frankly, not many of them. Operational innovation is rare. By my estimate, no more than 10% of large enterprises have made a serious and successful effort at it. And that shouldn't be. Executives who understand how operational innovation happens—and who also understand the cultural and organizational barriers that prevent it from happening more often—can add to their strategic arsenal one of the most powerful competitive weapons in existence.

The Payoffs
For most of its history, Progressive focused on high-risk drivers, a market that it served profitably through extremely precise pricing. But in the early 1990s, the insurer believed that much larger companies were about to enter this niche and emulate its approach to pricing; the company's managers realized it couldn't compete against larger players on a level playing field. So Progressive decided to win the game by changing the rules. It reinvented claims processing to lower its costs and boost customer satisfaction and retention.

The company introduced what it calls Immediate Response claims handling: A claimant can reach a Progressive representative by phone 24 hours a day, and the representative then schedules a time when an adjuster will inspect the vehicle. Adjusters no longer work out of offices from nine to five but out of mobile claims vans. Instead of taking between seven and ten days for an adjuster to see the vehicle, Progressive's target is now just nine hours. The adjuster not only examines the vehicle but also prepares an on-site estimate of the damage and, if possible, writes a check on the spot.

This approach has many benefits. Claimants get faster service with less hassle, which means they're less likely to abandon Progressive because of an unsatisfactory claims experience. And the shortened cycle time reduced Progressive's costs dramatically. The cost of storing a damaged vehicle or renting a replacement car for one day—around $28—is roughly equal to the expected underwriting profit on a sixmonth policy. It's not hard to calculate the savings this translates into for a company that handles more than 10,000 claims each day. Other benefits for Progressive are an improved ability to detect fraud (because it is easier to conduct an accident investigation before skid marks wash away and witnesses leave the scene), lower operating costs (because fewer people are involved in handling the claim), and a reduction in claim payouts (because claimants often accept less money if it's given sooner and with less travail).

No single innovation conveys a lasting advantage, however. In addition to Immediate Response, Progressive has also introduced a system that allows customers to call an 800 number or visit its Web site and, by providing a small amount of information, compare Progressive's rates with those of three competitors.
(Because insurance is a regulated industry, rates are on file with state insurance commissioners.) This offer has attracted customers in droves.

The company has also devised even better ways of assessing an applicant's risk profile to calculate the right rate to quote. When Progressive realized that an applicant's credit rating was a good proxy for responsible driving behavior, it changed its application process. Now its computer systems automatically contact those of a credit agency, and the applicant's credit score is factored into its pricing calculation. More accurate pricing translates into increased underwriting profit. Put these all together, and Progressive's remarkable growth becomes comprehensible.

Other companies have made similar performance gains through operational innovations. Beginning in 1994, Eastern Electric, a UK power utility, created a process that reduced the time needed to initiate electrical service by 90% and its cost by 66%. In the late 1990s, IBM invented a new product-development process that caused a 75% reduction in the time to develop new products, a 45% reduction in development expenses, and a 26% increase in customer satisfaction with these new products. In 2002, Shell Lubricants reinvented its order fulfillment process by replacing a group of people who handled different parts of an order with one individual who does it all. As a result, Shell has cut the cycle time of turning an order into cash by 75%, reduced operating expenses by 45%, and boosted customer satisfaction 105%—all by introducing a new way of handling orders. Time, cost, and customer satisfaction—the dimensions of performance shaped by operations—get major boosts from operational innovation.

### A Powerful Weapon

<table>
<thead>
<tr>
<th>Strategic benefits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>higher customer retention</td>
</tr>
<tr>
<td></td>
<td>greater market share</td>
</tr>
<tr>
<td></td>
<td>ability to execute strategies</td>
</tr>
<tr>
<td></td>
<td>ability to enter new markets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marketplace benefits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lower prices</td>
</tr>
<tr>
<td></td>
<td>greater customer satisfaction</td>
</tr>
<tr>
<td></td>
<td>differentiated offerings</td>
</tr>
<tr>
<td></td>
<td>stronger customer relationships</td>
</tr>
<tr>
<td></td>
<td>greater agility</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operational benefits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lower direct costs</td>
</tr>
<tr>
<td></td>
<td>better use of assets</td>
</tr>
<tr>
<td></td>
<td>faster cycle time</td>
</tr>
<tr>
<td></td>
<td>increased accuracy</td>
</tr>
<tr>
<td></td>
<td>greater customization or precision</td>
</tr>
<tr>
<td></td>
<td>more added value</td>
</tr>
<tr>
<td></td>
<td>simplified processes</td>
</tr>
</tbody>
</table>

Innovative operations can result in direct performance improvements (faster cycle time and lower costs), which lead to superior market performance (greater customer satisfaction and more highly differentiated products). And improved market performance yields a host of strategic payoffs, from higher customer retention to the ability to penetrate new markets.

### Organizational Barriers

Compared with most of the other ways that managers try to stimulate growth—technology investments, acquisitions, major marketing campaigns, and the like—operational innovation is relatively reliable and low cost. So why don't more companies embrace it?

The question is particularly significant because operational innovation is needed now more than ever. Most industries today are struggling with low-growth, even stagnant, markets. Overcapacity is rampant, and competition—particularly global competition—is fierce. Virtually all product and service offerings have become commodities, almost no one has any pricing power, and none of this is likely to change in the near future. In this environment, the only way to grow is to take market share from competitors by running rings around them: by operating at lower costs that can be turned into lower prices and by providing extraordinary levels of quality and service. In other words, the game must now be played on the field of operations.

Mere operational improvement is not enough to win the game. Excellence in execution can win a close game, but it can’t break a game wide open and turn it into a rout. The only way to get and stay ahead of competitors is by executing in a totally different way—that is, through operational innovation.
But operational innovation entails a departure from familiar norms and requires major changes in how departments conduct their work and relate to one another. It is truly deep change, affecting the very essence of a company: how its work is done. The effects of operational innovation ripple outward to all aspects of the enterprise, from measurement and reward systems and job designs to organizational structure and managerial roles. Thus, it will never get off the ground without executive leadership. Yet senior managers rarely perceive operational innovation as an important endeavor, nor do they enthusiastically embrace it when others present it to them. Why not? The answers hinge on some unpleasant characteristics of contemporary corporate leadership.

Business culture undervalues operations. I have spoken with thousands of managers from hundreds of companies about operational innovation. Overwhelmingly, they’ve told me that their senior executives did not understand, support, or encourage it. As one manager said, “In our company, operations is not glamorous. Deals are.” Making acquisitions, planning mergers, and buying and selling divisions will get the company’s name and the CEO’s picture in business magazines. Redesigning procurement or transforming product development will not, even though it might be much more important to the company’s performance. Deals are easily explained to and understood by boards, shareholders, and the media. They offer the prospect of nearly immediate gratification, and the bold stroke of a deal is consistent with the modern image of the executive as someone who focuses on grand strategy and leaves operational details to others. The fact that the great majority of deals are unsuccessful does not deter executives from pursuing them.

Operations simply aren’t sexy. One business school student recently observed to me, “There seems to be a hierarchy in the business world. Finance and strategy are at the top, marketing and sales occupy the middle tier, and operations is at the bottom.” An insurance CEO once quipped that managers work hard at operations so they can be promoted to the executive level, where they can stop worrying about operations. A journalist at a prominent business magazine, assigned to do a story on operations, confessed that he thought it boring. This is the state of our business culture. The core, value-creating work of enterprises has become low status.

Operations are out of sight (and out of mind-set). At its heart, operations is a branch of engineering. It requires a skill set and a mind-set different from those needed in most other executive activities. Most senior managers focus on strategic planning, budgeting, capital allocation, financial management, mergers and acquisitions, personnel issues, regulatory concerns, and other macro issues, very different from the design work at the heart of operational innovation.

Many top managers are ignorant about operations and uninterested in learning more. They’ve ascended to the highest levels of the enterprise without ever getting their hands dirty. They enter the organization through finance, strategy, or marketing and build their reputations on work in these domains. When they move into their first general management role, they rely on others—plant managers, engineers, customer service leaders—to mind the details of the actual work. Their role is one of supervision, resource allocation, and direction—all vital, but all perched precariously on a foundation not grounded in the bedrock of the organization’s real work.

At a major semiconductor maker, for instance, a group of middle managers who were frustrated with the complexity and poor performance of their order fulfillment process decided to make a case for change to executive management. They created a two-page diagram illustrating the endless series of steps every order went through, the redundant moves of the product between factories and depots, the accumulations of inventory, and the enormous delays. When members of the company’s executive committee saw it, they were incredulous: “We do this?”

It should not be surprising that executives without experience in operations do not look there for competitive advantage. The information they usually get does little to focus their attention on the mechanics of operations. How many executives receive data about order fulfillment cycle time, or the accuracy of customer service responses, or the cost of each procurement transaction, or the percentage of parts that are reused in new products? Indeed, in how many organizations is such information available at all? Financial data dominate the discourse in the modern organization, al-
though operational performance is the driver of financial results.

**Nobody owns it.** No one holds the title Vice President of Operational Innovation; it is organizationally homeless. It doesn't fit into R&D, where product innovation is based. Functional line managers are too focused on meeting deadlines to have time for or interest in inventing new ways of doing things. What's more, important innovations are not limited to individual departments but involve end-to-end processes that cross departmental boundaries. Normal planning and budgeting focus on investments in new equipment, products, and services and take account of process improvement. It's a rare company whose budget or planning process explicitly looks for process breakthroughs. No wonder operational innovation has a hard time gaining traction in an organization.

This is particularly problematic because operational innovation can easily founder in a sea of competing but smaller change initiatives. It is all too common for enterprises today to have dozens—even hundreds—of operational improvement programs under way at any point in time. Some are technologically based, such as the implementation of enterprise resource planning (ERP), customer relationship management (CRM), or supply chain management (SCM) software systems. Others are centered on specific bodies of improvement techniques, such as Six Sigma quality or lean enterprise programs. Still others are defined in terms of outcomes, such as accelerating time to market or presenting a single face to customers, or focused on improving a particular aspect of the enterprise (procurement or customer service, for example). Each project typically has a narrow scope, a group of experts dedicated to it, and a sponsor whose enthusiasm is tolerated by his or her peers only as long as it is kept within bounds.

This kind of situation can cripple operational innovation because an organization has only so much capacity for change. If people are already juggling a great many improvement projects, they may conclude that they can't handle an innovation effort as well. Indeed, in a company consumed with improvement projects, the distinction between improvement and innovation may be lost. Improvement projects can also get in the way of innovation efforts by appearing to address similar issues. For instance, many companies implementing ERP or SCM systems merely use them to enhance existing processes. Real innovations in order fulfillment or supply chain management are also likely to involve these technologies, but they may be dismissed because, people think, "we're already doing ERP."

**Making It Work**

How do operational innovation efforts begin if no one is responsible for them and no formal channels for creating programs exist? Most often they start as grassroots movements, fostered by people sprinkled throughout organizations who are passionately committed to finding and exploiting opportunities for operational innovation. These catalysts take it upon themselves to find a leader who can grasp what they have in mind and then spearhead the innovation effort. The executive must have both the imagination and the charisma needed to drive major operational change.

Then the catalysts relentlessly campaign for the cause—confronting the executive with the inadequacies of existing operations and arranging for meetings with peers from other companies that have successfully implemented operational innovations. The campaign will be helped immensely if catalysts can tout existing pockets of operational innovation within their own organization. Maybe one plant implemented a new way of scheduling production, or a customer service center used a CRM system in a new way, or a sales team created a new way to support customers. Examples like these will help convince a leader that operational innovation can work.

Once the top executive is convinced that operational innovation is worth pursuing, the organization needs to focus its efforts. Because operational innovation is by nature disruptive, it should be concentrated in those activities with the greatest impact on an enterprise's strategic goals.

Progressive, for instance, realized that the key to its profitable growth is customer retention because acquiring new customers through commission-based agents is very expensive. And the key to customer retention is making sure customers have rewarding interactions with the company. That's why Progressive concentrated on streamlining claims; making it a more pleasant experience for customers would...
directly affect overall performance. Many auto insurers, by contrast, view claims as a nuisance at best because it entails paying claimants. They consider it to be a low-priority activity that doesn’t deserve attention.

Or consider how American Standard, the diversified manufacturer, decided where to focus its innovation efforts in the early 1990s. It had just survived a hostile takeover bid by going through a leveraged buyout, and leaders realized that servicing the debt would consume virtually all the company’s available cash and starve product development efforts. Because a large amount of cash was tied up in inventories, the CEO mandated that the company would have to drive down its working capital and dramatically increase inventory turns. A program was instituted to transform manufacturing from a conventional push-based system to one pulled by actual demand using a system known as Demand Flow Manufacturing. The innovation paid off and led to a successful IPO a few years later.

Using similar analyses, other companies have pinpointed procurement, order fulfillment, new product development, post-sales customer support, and even budgeting as the place where innovation would have the greatest effect on achieving key strategic goals. While operational innovation need not be confined to just one area, most companies find it prudent to limit their innovation programs to no more than two or three major efforts at a time. To undertake more would probably consume too many resources and create too much organizational disruption.

After selecting the area for innovation, the company must set stretch performance goals. At American Standard, the goal was to triple its inventory turns; at Progressive, to initiate claims within nine hours. Absent such specific targets, innovation efforts are likely to drift or degenerate into incremental improvement projects. Only a daunting target—clearly unattainable through existing modes of operation—will stimulate radical thinking and willingness to overturn tradition.

Inventing a new way of operating that achieves the target need not be simply a matter of crossing your fingers and hoping for inspiration. Following these suggestions should accelerate your efforts.

**Look for role models outside your industry.** Benchmarking within your own industry is unlikely to uncover breakthrough concepts. But techniques used in other industries with seemingly very different characteristics may turn out to be unexpectedly applicable. For instance, in the 1980s, Taco Bell transformed its restaurant operations by thinking about them in manufacturing rather than in fast-food terms. The restaurant chain reduced the amount of on-site food preparation by outsourcing to its suppliers, centralizing the production of key components, and concentrating on assembly rather than fabrication in the restaurants. The new approach lowered Taco Bell’s costs and increased customer satisfaction by ensuring consistency and by allowing restaurant personnel to focus on customers rather than production. Harvard Pilgrim Health Care has applied techniques of market segmentation, common in consumer goods but not in health insurance, to identify patients most likely to have a medical crisis and to intervene before the crisis occurs.

**Identify and defy a constraining assumption.** At its heart, every operational innovation defies an assumption about how work should be done. Cross-docking negates the assumption that goods need to be stored in a warehouse, build-to-order that goods should be produced based on forecasts and destined for inventory. Zero in on the assumption that interferes with achieving a strategic goal, and then figure out how to get rid of it. A major hospital, for instance, recognized that to increase the number of patients admitted for (well-reimbursed) cardiac bypass graft operations, it needed to respond more quickly to physicians who wanted to refer a patient. The reason for the delay in response was the assumption that the hospital first had to assign a prospective patient a bed, a supposition that generated hours of delay and often led physicians to send their patients somewhere else. The solution? Send the patient to the hospital immediately, and assign the bed while the patient is in transit.

**Make the special case into the norm.** Companies often achieve extraordinary levels of performance under extraordinary conditions; their problem is performing extraordinarily in normal situations. One way to accomplish this is to turn the special-case process into the norm. A consumer packaged-goods maker, for instance, based its production scheduling on sales forecasts rather than on actual customer
demand. When demand for a new product wildly exceeded forecasts, an ad hoc process was created that gave the manufacturing division real-time information about customer demand, which in turn allowed them to do production planning and product distribution much more efficiently. After the crisis had passed, the company decided to adopt this emergency mode of operation as its standard one. The results included a dramatic drop in inventory, an improvement in customer service, and a major reduction in the total cost of product deployment.

Rethink critical dimensions of work. Designing operations entails making choices in seven areas. It requires specifying what results are to be produced and deciding who should perform the necessary activities, where they should be performed, and when. It also involves determining under which circumstances (whether) each of the activities should or should not be performed, what information should be available to the performers, and how thoroughly or intensively each activity needs to be performed. Managers looking to innovate should consider changing one or more of these dimensions to create a new operational design that delivers better performance. (The exhibit “Reimagining Processes” shows examples of companies that have rethought these various dimensions of work.)

### Getting Implementation Right

In *The Innovator’s Dilemma*, Clayton Christensen observed that conventional market-analysis tools lead organizations astray when applied to disruptive technologies. In a similar way, conventional implementation methodologies often lead to failure when applied to disruptive modes of operation.

Companies that follow traditional implementation methodologies inevitably take too long. There is so much to be done, and so much that must be integrated with everything else, that years can pass before the innovation is implemented and its benefits start to flow. Furthermore, because every proposed major change in operating procedures is invariably greeted with a chorus of “it will never work,” a lengthy implementation period gives opponents an extended opportunity to campaign against it. In fact, even those who aren’t aggressively opposed to the innovation will find a protracted transition unsettling and disquieting. As more time passes and more money is spent without the innovation or its payoffs seeing the light of day, organizational support leaks away. Executive leadership then loses heart, and the denouement is inevitable.

Another problem with conventional implementation is that it assumes that the initial specifications for an operational innovation will be accurate and complete. In reality, they will be neither. When envisioning new ways of working, it is impossible to get everything right from the outset. Ideas that look good on paper don’t always work as well in practice; only when a concept is actually tried does one learn what it should really have been in the first place. Companies must be prepared to roll with the punches and learn as they go. An ap-

<table>
<thead>
<tr>
<th>Dimension of work</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What results the work delivers</td>
<td>Progressive Insurance increased market share by informing customers of its competitors’ rates as well as its own.</td>
</tr>
<tr>
<td>Who performs the work</td>
<td>Shell Lubricants improved cycle time by changing its order fulfillment process so that one person handles all aspects of an order (instead of seven people each working on one aspect).</td>
</tr>
<tr>
<td>Where the work is performed</td>
<td>Taco Bell cut costs by preparing ingredients in commissaries rather than in individual restaurants.</td>
</tr>
<tr>
<td>When the work is performed</td>
<td>A major hospital responded to physician referrals more quickly by assigning a bed after, rather than before, agreeing to accept a patient.</td>
</tr>
<tr>
<td>Whether the work is performed</td>
<td>Wal-Mart cut costs by cross-docking from truck to truck instead of storing goods in warehouses.</td>
</tr>
<tr>
<td>What information the work employs</td>
<td>A consumer packaged-goods manufacturer reduced inventory by basing its production scheduling on actual orders rather than on forecasts.</td>
</tr>
<tr>
<td>How thoroughly the work is performed</td>
<td>Harvard Pilgrim Health Care cuts costs by carefully analyzing patients to identify those who need intervention before a crisis strikes.</td>
</tr>
</tbody>
</table>
parel manufacturer had to regroup when the technology underlying its plans for a new approach to production scheduling did not live up to expectations; a consumer goods maker had to scale back an innovation in logistics when its implementation became more difficult than expected.

Companies need to adopt a new approach to implementing operational innovations. This alternative method builds on an idea that is popular in software product development, an idea variously known as iterative, evolutionary, or spiral development. One begins with one's best estimate of the innovation, builds a first version of it, and then tries it out with customers or users. Knowledge gained from these tests is then fed back into a fast-cycle iteration of the next version.¹

Companies would also be wise not to try to implement an innovation all at once. Breaking a large-scale implementation into a series of limited releases creates momentum, dispels skepticism and anxiety, and delivers a powerful rejoinder to carping critics.

When MetLife, for instance, was implementing a new process for installing coverage of a new customer, it did so in two releases. The first involved the creation of a new role—a case-implementation leader, who was responsible for collecting all the information to establish coverage. In that release, a new project-management tool was also introduced to control the process. That took only a few months and delivered substantial reductions in cycle time, as well as a 15% productivity gain. But it continued to rely on old information systems to support the process. In the second release, a new information system was installed that facilitated data collection and the production of documentation and also offered enhanced reporting capabilities. This second release delivered another 20% productivity improvement, as well as a 20-point increase in customer satisfaction.

Shell Lubricants followed a similar strategy when it transformed its order fulfillment process. The first release brought all the departments involved in the process under a single manager. This easy-to-implement change quickly delivered a degree of performance improvement. The improvements continued when the next release brought people from the various departments together into cross-functional teams. In the final release, each team member was trained to handle an entire order. This was the goal from the outset; Shell simply reached it in manageable steps.

Is It Sustainable?

Even with all the benefits operational innovation can deliver, some executives may wonder if it is truly worth the effort. Why bother to be the first on the block to develop and deploy a new way of working? Why not let a competitor break that ground and then capitalize on its experiences, doing an even better job? Indeed, where is the real strategic advantage in operational innovation at all? Once one company introduces a new way of doing things, all competitors can follow, and before long all are back on the same level playing field.

In theory, that is a powerful argument, but in the real world, operational innovations have legs. Even today, not all auto insurers offer immediate claims response. And despite Dell’s success, build-to-order has not swept the PC industry. At one major PC maker, an effort to do so was suppressed by both the head of manufacturing (who was concerned that it would lead to outsourcing) and the head of marketing (who was afraid of alienating the retail channel), and top leadership was too preoccupied with other matters to intervene. Toyota has confidently opened its factories to visitors from other automakers and yet continues to expand its productivity lead.

There are many reasons why theoretically imitable operational innovations have staying power. Some companies, even when confronted by a competitor’s innovations, will not rush to emulate them. Denial of competitor superiority and a disinclination to truck with operations are powerful forces of nature, and so is organizational inertia. Some competitors who attempt to imitate the innovation won’t understand it, and others won’t be able to implement it. Even those who do follow will be at a disadvantage until they catch up.

Operational innovation is a step change: It moves a company to an entirely new level. Once there, the organization can focus its efforts on a generation of additional changes—refinements of the innovation—that will keep it ahead of the pack until the inevitable time comes for a new wave of innovation.

That’s why companies should strive to make operational innovation not an extraordinary project but a way of life. Even areas of the busi-
ness that have already been rethought can benefit from subsequent rethinking as new technologies and new customer needs make the old innovations passé. Companies that bake operational innovation into their culture make competitors continually scramble to catch up with the changing rules. What’s more, they can even develop a reputation with customers for relentlessly improving performance, a brand promise of extraordinary value.

Progressive has created such a culture; leaving well enough alone is a principle with which the company is systemically uncomfortable. It recently revised its very successful Immediate Response claims process so that the representative no longer attempts to assign an adjuster as soon as the claimant calls. Rather, the representative guarantees to call the claimant back within two hours with specifics about when an adjuster will see the vehicle. This two-hour window gives the company the opportunity to assign the right kind of adjuster given the specifics of the case, so that a junior adjuster is not confronted with a complex accident beyond his level of expertise. Progressive is also deploying in select markets what it calls a concierge approach to claims handling. Here, a claimant simply brings the car to a Progressive claims facility at a convenient time and leaves it there, picking up a loaner at the same time. Progressive then takes responsibility for getting the car fixed. Under this system, the claimant is spared the hassle of dealing with body shops, the Progressive adjuster works in a climate-controlled environment that allows more careful inspection, and the body shop doesn’t have to get between Progressive and its customers. By the time its competitors imitate this latest innovation, Progressive will no doubt have moved onto something else.

Operational innovation may appear unglamorous or unfamiliar to many executives, but it is the only lasting basis for superior performance. In an economy that has overdosed on hype and in which customers rule as they never have before, operational innovation offers a meaningful and sustainable way to get ahead—and stay ahead—of the pack.

1. Marco Iansiti and Alan MacCormack describe how this approach was successfully applied in the development of Internet browsers in their article “Developing Products on Internet Time” (HBR September–October 1997).
Further Reading

**ARTICLES**

**The Power of Virtual Integration:**
An Interview with Dell Computer’s Michael Dell
by Joan Magretta
*Harvard Business Review*
March–April 1998
Product no. Product no. 7907

Hammer’s article asserts that companies can use breakthrough innovations in operations to destroy competitors and shake up whole industries, and Dell Computer is living proof. Back in 1984, Michael Dell decided to sell PCs directly to customers and build products to order. In one swoop, he eliminated the reseller’s markup and the costs and risks associated with carrying large inventories of finished goods. The result—the direct business model—propelled Dell ahead of such powerhouses as IBM, Compaq, and HP. This interview offers a deeper look inside Dell’s highly publicized success and offers a model of how traditional relationships in a value chain can be reconceived. The individual pieces of Dell Computer’s strategy—customer focus, supplier partnerships, mass customization, just-in-time manufacturing—may all be familiar. But Michael Dell’s insight into how to combine them is highly innovative.

**The Lean Service Machine**
by Cynthia Karen Swank
*Harvard Business Review*
October 2003
Product no. R0310J

To create an operational innovation in your own company, asserts Hammer, find role models outside your industry and apply their best practices to your operations. That’s precisely what Jefferson Pilot Financial did when it was looking for new ways to grow. The life insurance and annuities firm wanted to reduce turnaround time on policy applications, simplify the submission process, and reduce errors, so JFP managers looked to the manufacturing sector for inspiration—particularly, to the “lean production” practices U.S. manufacturers adopted in response to Japanese competitors. The adoption process JFP managers followed echoes much of Hammer’s advice—first setting up a “model cell” where kinks can be ironed out, working to convince skeptics that the innovation really can work, and setting extremely high performance targets that could be reached only through radical innovations.

To Order

For reprints, *Harvard Business Review*
OnPoint orders, and subscriptions to *Harvard Business Review*:
Call 800-988-0886 or 617-783-7500.
Go to [www.hbr.org](http://www.hbr.org)

For customized and quantity orders of reprints and *Harvard Business Review* OnPoint products:
Call Frank Tamoshunas at 617-783-7626, or e-mail him at ftamoshunas@hbsp.harvard.edu