

# A leaner public sector

**Through lean and Six Sigma initiatives, public-sector agencies can improve performance and productivity—but the impact won't stick if they ignore the “soft” side of making operational change happen.**

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and John Stoner**

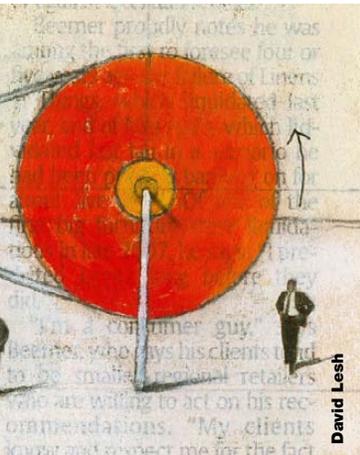
For several years, government leaders have been seeking ways to reduce waste through operational-improvement programs inspired by lean manufacturing, Six Sigma, or both.<sup>1</sup> Classic lean techniques for eliminating waste, variability, and inflexibility have been used successfully in a variety of agencies, from those with processes that somewhat resemble manufacturing (such as defense-related logistics units) to others where the ideas might seem less obviously relevant (such as intelligence agencies or policy-making bodies).

Yet for every success, there are several instances in which public agencies take a narrow view of lean operations. They devote their efforts exclusively to mastering the “hard” aspects of operational improvement—the technical tools and analytical

solutions that abound in lean and Six Sigma tool kits (see sidebar, “Lean and Six Sigma basics,” page 13). To some extent, this is understandable because the tools are objective and straightforward, and trained experts are invaluable in diagnosing problems and suggesting solutions. But it is easy to fall into the trap of thinking that simply by training and deploying technical experts, an agency will achieve significant improvements in its performance.

Neglecting the “soft” side of lean—which includes steps that enable leaders to drive continuous improvement and change the way employees think and work—can delay or even derail an operational transformation. Organizations can reap larger and more sustainable benefits by taking an approach that balances a lean program’s

<sup>1</sup> While lean and Six Sigma are distinct methodologies, many organizations combine elements of the two. In this article, we outline best practices that are equally fruitful in lean, Six Sigma, and related hybrid environments, rather than advocate one approach over the other.



hard and soft elements (exhibit). Agencies must properly embed the softer aspects of lean by implementing the appropriate management infrastructure and by focusing on changing employees' mind-sets and capabilities.

### Establishing the management infrastructure

Once an agency has identified what technical improvements are needed for an operating system, it must develop a corresponding management infrastructure to support and enable change. By management infrastructure, we mean the formal structures and processes that are used to manage systems and achieve business objectives. We have identified a few steps toward establishing the management infrastructure that are also key to the sustained success of a lean transformation.

#### Link process metrics to value

To streamline its processes appropriately, an agency must first develop a thorough understanding

of its end-to-end processes and where the value lies in each step of each process.

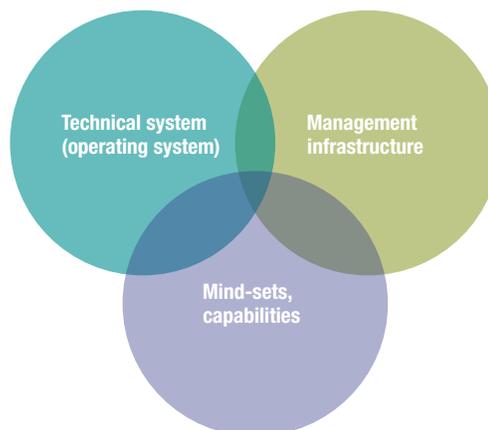
The US government's recent efforts to shorten the security-clearance process is a case in point. Over the course of five years, the process had lengthened by 40 percent—to 446 days. The US Government Accountability Office had estimated that clearance backlogs cost the government about \$1 billion per year in additional personnel costs. But before the government could propose potential solutions, it had to be able to measure performance for each process step. This included identifying what made each step necessary, describing how it added value to the overall process, and finding sources of waste in each step—an analytic technique known as value-stream mapping. To develop an accurate value-stream map, individuals involved in the process must remain completely objective, which can be very difficult for people who are experts at what they do and who have been doing it for a long time. Our strong recommendation in these cases is to form a cross-

Exhibit

## A balanced approach

Marrying hard and soft elements is the key to a sustainable operational transformation.

The way corporate resources are deployed to meet customer needs at the lowest cost



Formal structures and processes companies use to manage technical systems and achieve business objectives

The way people think and feel about their work and conduct themselves in their workplace

functional team with representatives who interact with the process in a variety of ways and therefore see it from different perspectives; such a team is better able to design an ideal process. The team charged with security-clearance reform came up with a new process that would reduce more than tenfold the time required to get a clearance—to roughly 40 days.

of a policy-development division in the Canadian government. Developers were struggling with their expanding workload, and in the course of a lean transformation the division discovered significant variations in elements that should have been consistent for all projects, including how to define a project's scope, determine what priority it should receive relative to other projects, decide

## Agencies must establish a disciplined approach to solving problems on the front line, taking care to avoid a “gotcha” mentality that will almost certainly demoralize staff

### Get data to the right people at the right time

Critical to a lean transformation's sustainability is management's ability to track unit performance and make fact-based decisions. Agencies can collect and disseminate performance data either manually or by using a sophisticated IT system that produces performance reports or dashboards, but the technology they use is much less important than the metrics they choose. An agency must understand and focus on the key performance indicators (KPIs) that matter most, agree on a straightforward way to measure them, and ensure that the right people are reviewing and discussing them at the appropriate times. Agencies must establish a disciplined approach to solving problems on the front line, taking care to avoid a “gotcha” mentality that will almost certainly demoralize staff. Leaders of public health care organizations in Europe and North America have found that by gathering and sharing performance data in a constructive way, they have helped motivate employees to improve performance.

### Establish new roles to smooth processes

Changes in processes will often necessitate a redesign of roles in the organization. Take the case

what skills were needed, establish quality guidelines, and lock in a timeline. To avoid variability, the division concluded that a single person should be responsible for performing all these tasks. This insight immediately led to the creation of a new role, the policy coordinator, who would work with management to ensure consistency in all the project elements mentioned before. The creation of this role improved overall efficiency by 10 percent.

### Align interests to drive momentum

In an effort to prevent enthusiasm from waning after the initial stages of a transformation, organizations have tried all manner of monetary and nonmonetary incentives. Such incentives, if they are to work, must be crafted carefully; they should benefit employees as well as the larger organization. Corporations and public agencies alike, for example, have seen improvements in morale as the result of gainsharing arrangements, under which any savings achieved through the transformation are reinvested in the agency. Such arrangements also help embed the concept of continuous improvement. But failure to reinvest at the proper level may dilute the value of this incentive. For example, at the defense

department of one European government, the savings delivered by an aircraft maintenance unit were reinvested for the benefit of the entire defense department rather than for the benefit of the unit. This prevented the unit's staff members from fully supporting the department's aggressive cost-reduction targets. However, the same unit saw real changes in behav-

ior among its contractors as a result of gainsharing arrangements that split the benefits when contractors finished work for less than the contract price. The contractors were more willing to share technical knowledge and to innovate while seeking to reduce costs. In the first year of such a program with one of its contractors, the unit achieved savings of approximately €12 million.

## Lean and Six Sigma basics

During the past 20 years, lean and Six Sigma have become the most prominent performance-improvement programs adopted by global manufacturing and, more recently, service companies and government agencies. Both lean and Six Sigma are built on the driving principle that a business is improved by relentlessly solving problems that affect the customer. But what's the difference between the two?

### Lean

Lean, which has its origins in the Toyota Production System, is focused on improving process flows in a system for the ultimate benefit of the customer or end user. The idea is to remove the key sources of loss from the process—waste, variability, and inflexibility—in a continuous search for ways to increase efficiency. All activities that do not add value to the process are considered waste, the primary sources of which include waiting, rework, and the handing off of tasks from one person to another. Variability is any deviation that creates unnecessary costs, and may be caused by a lack of control over the process or unplanned changes in demand. Inflexibility refers to the inability to meet customer requirements without incurring unnecessary costs. Backlogs and lead times contribute heavily to inflexibility.

### Six Sigma

Six Sigma was pioneered at Motorola. Like lean, its ultimate goal is continuous improvement, and it seeks to reduce variability. However, Six Sigma is much more rooted in statistics and tends to be favored by engineers and

people with scientific backgrounds, who are drawn to its mathematical precision and the logic of its approach. The three key elements of Six Sigma are its statistical tools, the DMAIC<sup>1</sup> process, and the certification of staff through a system of colored belts derived from martial arts traditions.

### Unlocking the toolbox

Both lean and Six Sigma give organizations powerful tools to help transform their operations for the benefit of the customer, but understanding these tools is not enough to deliver real benefits. For any improvement process to deliver real impact, its tools must be in the hands of the right people across the organization, and those people must get into the habit of applying them repeatedly and relentlessly in almost everything they do. Reaching this point is one of the most challenging aspects of business improvement.

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<sup>1</sup>DMAIC is an abbreviation for the process steps design, measure, analyze, improve, and control.

### Changing mind-sets and capabilities

Our experience in applying lean concepts—both in the public and private sectors—demonstrates that the failure to sustain change over the long term is often due to inattention to employees' mind-sets and capabilities. Without the shift to a performance culture, it will be difficult to initiate change and to have employees adhere over time to the new standards. Again, this shift must be accomplished concurrently with changes to the operating system and management infrastructure.

### Get staff to focus on the customer

One of the most difficult changes to make in government agencies is the shift to a customer-centric organization. Dissatisfied customers do not have as big an impact on the public sector as they do on the private sector, because there are often no competitors for the agency's services, and thus no effect on the bottom line. Nevertheless, there are ways to help employees better understand the customer's perspective. One is to have employees walk in a customer's shoes. Some agencies have had one or more employees follow a customer through the entire process of completing an interaction with agency personnel. The employees can then feel the frustration of waiting lengthy periods of time or encountering a less-than-helpful attitude and report back the experience to other team members with supporting data. Once employees empathize with customers, the agency can begin to coach employees on customer-management skills such as building trust, having difficult conversations, engaging in active listening, and resolving conflict. For one Canadian agency that provides loans and insurance services to export-oriented local businesses, this type of approach involved extensive one-on-one and group coaching sessions on how to improve interactions with customers. Employee motivation improved, and productivity (as measured by the number

of deals completed per full-time employee) increased by 40 percent.

### Break down bureaucratic silos

Another significant challenge in public-sector lean efforts is "bureaucracy think," which becomes a particular problem when—as is often the case—a process cuts across government agencies. But silos can be broken down. One strategy is to educate units about what other units involved in their processes do. This can be done through informational sessions or by having employees spend a day shadowing their counterparts in other organizations. Another effective technique is to create shared metrics or help units better understand their shared goals. Assembling leaders from different units into problem-solving teams can go a long way in this regard. For example, one reason the US security-clearance process became so complex was that the intelligence agencies had different requirements for security clearances. Each agency believed its requirements were unique and thus warranted a different set of criteria and processes. To break free of this mind-set, a cross-functional team was created that included leaders from each of the agencies. The team was accountable for meeting the president's mandate to create a new process, and its members came to realize that great efficiencies could be gained by having a central organization govern a common process. Team members also began to feel a sense of loyalty to one another, which helped them resolve tensions that might have lingered had they worked only within their silos.

### Lead by example

If leaders do not convey that there is an urgent need for change, then the lean transformation will not be as successful. A European courts system faced this challenge as it sought to apply lean methodologies in preparation for future budget



## Managers should thank employees for trying new approaches, and focus on solving problems rather than assigning blame for mistakes

cuts. After months of identifying process improvements, introducing a performance-management system, and changing roles and workflows, the project did not have as much impact as anticipated. Pilots showed that the time to accomplish certain critical tasks could be reduced by 50 percent, but because leaders in the justice ministry did not communicate any sense of urgency or commitment to change, ultimately the front line had no motivation to do anything differently. Conversely, the US government's work on security clearances benefited considerably from the positive and forceful mind-sets of the leaders of the effort. They set a clear goal—a transformed and sustainable security-clearance process—and made it plain that there would be accountability for any inefficiency in the new process.

### Inspire employees to overcome risk aversion

Another mind-set frequently encountered in the public sector is an aversion to performance measurement and risk. Often this stems from the perception (and sometimes, unfortunately, the reality) that there is more downside to surfacing problems than there is upside to making improvements. Management can play a large role in changing this perception. Managers should thank employees for trying new approaches, and focus on solving problems rather than assigning blame for mistakes. Risk aversion was so entrenched at one US government agency that at the beginning of a lean-transformation effort, the leaders likened the project to “turning

a battleship.” They overcame this mind-set by involving workers in the creation of the performance-management system. By piloting a wide range of best practices that came from employees, the leaders were able to achieve buy-in for new ways of doing the work. The agency also established a team to generate the next set of improvement ideas and to support field implementation of the ideas that had been piloted. The long-term impact was significant: within two years, the agency had reduced its cost structure by 15 percent, and within four years it had achieved \$4 billion in annual savings.



Lean transformation is a long-term commitment—a marathon, not a sprint. To be sure, there will always be opportunities for quick wins, but lasting improvement does not come after a few weeks of training or a few months spent identifying waste. Agencies must foster a culture of continuous improvement. Everyone from the front line to top management should be responsible for initiating new improvement ideas. For managers, this creates an imperative to spend time observing what is happening on the front line; reports generated by others are no substitute for first-hand observations. Managers should also set a new tone, one that represents the new standards to which everyone is expected to adhere, and create a work environment that fosters teamwork, discipline, and enthusiasm. ○