Building a Culture of Engagement with Lean Continuous Improvement

BY SHAYNE C. KAVANAGH AND HARRY KENWORTHY
Daniel Pink, the author of Drive: The Surprising Truth about What Motivates Us, suggests that the basis for a modern approach to motivation and engagement has three dimensions:1

- **Mastery:** The urge to make progress and get better at something that matters.
- **Autonomy:** The ability of employees to direct their own lives, have control over their work, and have a passion for what they do.
- **Purpose:** The yearning for work to be in the service of something larger than one’s self. Purpose drives passion, which in turn drives employee engagement and commitment.

Other articles in this issue of Government Finance Review — “Planning More Powerful Meetings,” “Applying Professional Developmental Tools to Employee Engagement,” “Stretch Assignments Give Employees Room to Grow,” and “Small Things Add Up: The Denver Peak Academy Approach” — share techniques designed to engage employees along the dimensions that Pink suggests. What is missing from a collection of individual techniques, however, is a systematic approach to changing the very culture of the organization. Culture is a system of shared assumptions, values, and beliefs, and it exerts a powerful influence on how people behave in an organization. Management guru Peter Drucker is reported to have said that “culture eats strategy for breakfast.” This means that if a strategy to fully engage employees is to be successful, then the culture must be aligned with Pink’s three motivational dimensions.

How can a government finance office build such a culture? As a first step, recognize that the traditional rewards and punishment approach to motivation and engagement (often referred to as the “carrot and stick” approach) is past its expiration date, a holdover from the Industrial Age. Many management philosophies persist from the industrial age, even though they’re no longer appropriate for a workforce that is generally more educated than that of Henry Ford’s heyday.2 These philosophies include the ideas that driving change and improvement is a manager’s job, whereas employees exist primarily to implement managers’ ideas; the primary role of managers is to make sure that workers stay on task; and work schedules should be prioritized before attention to quality.

The second step is to replace the traditional culture with something better. To do this, a number of government finance organizations have turned to Lean management, a system of engaging all employees in identifying wastes and solving problems in order to continually improve processes and thus provide more value to the customer (e.g., a citizen or another department). Lean is best known for its expansive set of efficiency-enhancing tools, but the system’s true power is in engaging employees in the work of the organization in a way that they have never before experienced — in other words, embedding Lean principles in the organizational culture.

This article examines how a number of government finance offices on the Lean journey have experienced employee engagement along Pink’s three dimensions, realizing impressive improvements for their customers as a result. For readers who are considering (or have just started) implementing Lean practices in their governments, the experience of other governments may help illuminate the way ahead.

### Lean Governments Studied for this Article, and the Starting Years of Their Lean Journeys

- King County, Washington — 2012
- State of Washington’s Department of Enterprise Services — 2011
- Gwinnett County, Georgia — 2009
- City of Baltimore, Maryland — 2013
- City of Roanoke, Virginia — 2012
- City of Fort Worth, Texas — 2014
- City of Denton, Texas — 2014
MASTERY: CONTINUOUS IMPROVEMENT OF THE STANDARD

If mastery is about making meaningful improvements to work, then Lean’s potential is indisputable. Research has found that organizations that have implemented Lean fully experience improvements in productivity of 8 to 12 percent annually, while improvement of 1 to 2 percent is more typical for organizations that don’t employ Lean. The Lean governments discussed in this article have made similar gains from improvement in how they used existing resources:

- The State of Washington’s Department of Enterprise Services Real Estate Services reduced the backlog of expired or soon-to-expire leases by 82 percent and moved from this stronger position to negotiate leases, resulting in cost avoidance of more than $8 million in lease costs over five years for agency clients.
- Gwinnett County reduced the average handling time for calls about appealing property valuations by approximately 50 percent by redesigning the appeal inquiry process. The redesign also allowed the county to handle a higher volume of calls without any increase in staffing. The result was reduced citizen frustration and more efficient processing of appeal requests.
- In the City of Baltimore, the retail business district licensing process had 93 steps and took nine months from initiation to completion. It now has 33 steps and takes six months to complete. As a result, abatements for businesses that owed the city money dropped from 101 in fiscal 2013 to 41 in fiscal 2014, and the percentage of businesses paying their fees on time increased from 68 percent in fiscal 2013 to 73 percent in fiscal 2014.
- In Fort Worth, it took more than 100 days to release Developer Community Facility Agreement financial guarantees and 71 days to obtain the contractor’s final close-out paperwork. It now takes fewer than 30 days after final inspection to release/return financial guarantees and five to seven days to obtain the contractor’s paperwork.
- By analyzing job applicant data and which applicants were ultimately hired, the City of Denton was able to make changes to the hiring process that cut the time it took to have new employees on board by 33 percent. The streamlined process has resulted in staff time savings across the city.
- The City of Roanoke went from an average of four months to 44 days, a 64 percent improvement, in recording deeds to new owners after a real estate tax sale. This reduction in time helped the city improve its relationship with buyers of tax sale property, which will improve the city’s neighborhoods by eliminating blight.

Finally, we had the opportunity to visit King County, Washington, in person to see their Lean implementation firsthand. We’ll use their experiences to illustrate many of the points made in this article.

Incremental Change. Lean doesn’t accomplish these kinds of improvements through radical change in what staff members do. Rather, the change comes in how they do it. Employees are constantly encouraged to ask how work is accomplished and how they can provide greater value to their customers.

Achieving mastery starts with establishing the expectation that work will be improved in many small increments over time, which, when taken collectively, equal impressive gains. When employees understand that it is not their job to maintain the status quo, but rather look to improve it in small ways every day, it adds a new sense of challenge to the work — but a challenge that they are able to meet, using Lean tools and techniques. Research shows that too much challenge can lead to frustration, but too little can lead to boredom, both of which lead to disengagement. A Lean culture presents employees with the right level of challenge, while giving them the ability to meet it.

Standard Work. As the organization gains experience with Lean, it can further enhance employees’ sense of mastery using the Lean concept of “standard work.” Standard work is a simple written description of the safest, highest quality, and most efficient way known to perform a particular process or task, including the steps to follow, the materials needed, and even the time needed per step. Standard work allows improvement in two ways. First, if deviation from the standard
occurs, employees can recognize it, take corrective actions, and recommend ways in which the standard work can be enhanced to prevent reoccurrences of deviations. Second, employees can make recommendations to improve standard work to their immediate supervisor — hence, the expectation is that the standard will continuously be improved. Exhibit 1 provides an example of a standard work document for researching a request to waive King County’s standard procurement process.

**Leader Standard Work.** Achieving mastery is not just for line employees; managers must also master new capacities and skills. One of the most important roles managers fulfill in a Lean system is to establish “leader standard work,” the actions that managers must take for employees to perform at their best. Examples of leader standard work include: always making responsibilities clear to employees; making sure that all employees are following the standard work; and coaching employees to identify and solve problems.

**Exhibit 1: King County’s Standard Work for Researching Requests to Waive the Procurement Process**

**Title of Standard Work/Process:** Research of claim made to waivers signatures for procurement. (Current State)

**Short Description of Standard Work/Process:** Waivers submitted to King County’s Finance and Business Operations Division make claims as to why the procurement process should be waived. These claims must be validated by a buyer and documented prior to approval by the division.

**Target Audience:** Procurement and Payables — goods and services buyers, leads, and supervisor

**Total Time (Start to Finish) For All Steps:** Variable — 1 to 2 days on average

**Needed Equipment, Tools, Supplies and/or Materials:** E-mail, Internet, printer, Oracle, procurement database, waiver tracker

**Business Process Owner Name, Title, Section of Division/Work Unit, E-mail, and Phone Number:**

[specific individuals would be named here, along with contact information]

<table>
<thead>
<tr>
<th>Step</th>
<th>Operator</th>
<th>Important Step (What)</th>
<th>Picture/Example to Illustrate the Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role responsible for step</td>
<td>Succinctly describe actions that…</td>
<td>Visuals needed to describe and illustrate the step</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Supervisor</td>
<td>Receives the hard copy waiver from the Strategic Partnerships and Analytics team.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Supervisor</td>
<td>Reviews the waiver.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Supervisor</td>
<td>Gives the waiver to the leader of the purchasing process.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Supervisor</td>
<td>Logs the waiver into the waiver tracker. [File location provided]</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Lead</td>
<td>Reviews the waiver.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Lead</td>
<td>Assigns the waiver to a buyer based on the commodity of the goods and/or services being purchased or current workload.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Lead</td>
<td>Updates the waiver tracker to note the person the waiver was assigned to.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Buyer</td>
<td>Reviews the waiver.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Buyer</td>
<td>Looks in the Oracle database and checks with other agencies to confirm that no other universal or competitively awarded contracts are in place with the vendor for the products needed.</td>
<td></td>
</tr>
</tbody>
</table>

[In this space, King County places screen shots, pictures, or other images that might be necessary to illustrate the steps. In this particular example, no images were needed]

[The document goes on to describe the remaining steps in the process.]
King County illustrates how employee standard work and leader standard work are integrated. Part of leader standard work in King County is to hold short weekly “huddles” in front of prominently placed “visual control” boards that display measures of process performance. Huddles are like what happens in a football game — the team comes together for short review of strategy in preparation for the next play (or, in a workplace, the next work week). Huddle attendees usually stand, to emphasize that the gathering is intended to be short and focused. A visual control board is a bit like a score board and a play book in one — it displays standards of work and how the team is doing against the standard. It also communicates the process used to perform the work. For example, King County’s visual control board from the Business Development and Contract Compliance group within King County’s Finance and Business Operations Division is shown in Exhibit 2. The board includes a flow chart at the top of the board that shows the major steps in the business development and contract compliance process. It also includes graphs and charts beneath each step that show measures of performance that are relevant to that step.

Reviewing the visual control board in huddles gives everyone a chance to review how the process is working and to talk about where adjustments need to be made. In the huddles, managers ask employees to any identify pain points they, or their customers, are experiencing. This gives employees the opportunity to identify and, later, solve problems, and puts the manager in a position to coach employees to think about opportunities for improvements. The visual control boards are a permanent part of the decor in King County’s Finance and Business Operations Division and the measures are regularly updated, so employees are always able to see how the work is going, even in their daily walks around the office.

Following standard work cannot be just a mechanical box-checking exercise, which is why managers must master the skill of coaching employees to identify and solve problems. For example, King County has found that some employees would prefer that the process performance indicators only show positive results at all times. However, managers must help employees get beyond their natural inclination to want to look good/avoid looking bad in front of management and make a real effort to identify the problems. Employees need to see problems as opportunities for making improvements. Management coaching will gradually lead to employees becoming autonomous problems solvers, with a bias toward action and working together with coworkers, rather than waiting for management to fix problems.

**AUTONOMY: THE INDIVIDUAL EMPLOYEE AS A PROBLEM SOLVER**

In Lean, the employee is a problem solver, not just a cog in the machine. To understand the essence of this aspect of a Lean culture, let’s go back to the beginnings of Lean in the automotive manufacturing industry. The traditional manufacturing approach has been characterized by an attitude of “move the metal,” where the assembly line was not to be stopped except under the most extraordinary of circumstances, and any mistakes would be caught and remedied in a separate quality assurance phase of assembly. Lean manufacturers, in stark contrast, put something called an “Andon cord” at each work station on the assembly line. Employees could pull the cord anytime they saw a problem, turning on a conspicuous signal light over
their workstation that would cause the entire line to stop and all employees and managers to come to over and engage in joint problem solving. One famous study showed the results of this approach: a traditionally managed luxury car manufacturer spent more money on fixing defects in their “quality assurance” phase than the Lean manufacturer spent building the entire car.5

Although government workers wouldn’t use an actual Andon cord, it serves as a metaphor for a Lean culture’s respect for every employee’s problem-solving capabilities, and it recognizes that those who are closest to the work are often best equipped to solve the problems. Enabling employees to take the initiative in solving problems starts with creating an atmosphere where employees feel safe to contribute new ideas.

One of the ways in which Lean creates this atmosphere is by promoting the idea that work results are primarily a product of the process/system set up to produce the work, rather than of the individuals working in that system. This idea might seem a bit foreign to managers in North American local governments, since psychological research shows that the Western mind tends to ascribe results to the actions of individuals rather than systems.6 In fact, researchers have found that Westerners often go too far in this direction, a phenomenon known as the “fundamental attribution error.”7 If management focuses on fixing processes rather than fixing people, it becomes easier to engage employees. Instead of blaming individuals for underperformance, the emphasis shifts to improving the process in order to get better results for the entire organization.

This is not to imply that individual people don’t matter in a Lean culture — in fact, they matter a great deal. In Lean, managers must master the skill of coaching employees to solicit good contributions and ideas for improvement. Managers set the tone that government exists to serve its customers and, as line employees are closest to the customers, line employees are an important part of helping government serve the customer most effectively. To this point, the governments we looked at report that one of the most important Lean tools they use in equipping individual employees to become autonomous problem solvers is “A3” reporting and problem solving.8

A3 is a bit like an Andon cord for the office. When employees see a problem they are encouraged to call attention to it, analyze the problem with their teammates, and develop a solution. An A3 report provides a structured approach to analyzing problems. It also fosters communication between managers and employees, and provides an opportunity for managers to coach employees. The precise format of the A3 report varied for each of the governments studied, but common elements include:

- Deep analysis of the problem, including identification of the root cause. This means there is a higher probability that the proposed solution will work because it is based on the true cause of problem, not on someone’s initial gut reaction of what the cause is.
- Ideas are tested out in a limited fashion before being fully implemented.
- Improvement is intended to be incremental, rather than revolutionary. This means it is easier to stop or reverse changes that aren’t working out as hoped.
- The employee’s analysis and solution is shared with teammates and supervisors for feedback.

Taking the Risk Out of Employee-Led Problem Solving

In non-Lean organizations, some managers are wary of employee-led problem solving because of the concern that the ideas employees generate could be impractical or risky. A3 helps address this concern by encouraging high-quality analysis and incremental solutions. Further, the documentation format gives managers confidence in the rigor that has been applied.
The example governments highlighted in this article told us that, when used with proper coaching and support from management, A3 is far more than a new form of paperwork — it is “A3 thinking,” where employees become capable autonomous problem solvers. Employees take ownership of problem solving, using A3 to keep managers informed, get coaching, and share their experiences with other employees, thereby generating further enthusiasm for problem solving. (Download A3 report formats at www.gfoa.org/resiliency.)

PURPOSE: UNDERSTANDING THE CONTRIBUTION TO THE GREATER GOOD

Government work, or public service, should have purpose. However, individual employees sometimes feel disconnected from the larger goals of their work units and from the citizens they serve. A Lean concept that helps bridge this gap is the “value stream,” which encompasses the steps in the process from the initial input (e.g., a firm’s application to become a certified vendor, as in Washington’s example) all the way to producing a valuable outcome for the customer (e.g., the vendor is certified). In Lean, all employees are encouraged to understand the entire value stream so they can see how their actions affect the whole process.

King County, for example, has defined the value stream for many of its financial work areas, such as: procure-to-pay, budget-to-report, billing-to-collect, and hire-to-retire. Exhibit 3 provides an example of King County’s procure-to-pay value stream. The colors of the boxes in the flow chart indicate the role of the county’s Finance and Business Operations Division: green means it is mostly the division’s step, orange means it is approximately half the division’s step, and gray means the step is completed by the division’s customer agency. Underneath the steps in the flow chart are the broad actions required to complete each step. (No steps are listed under the gray box because division staff members have no role.)

King County has found that thinking about work as value streams helps employees see how they fit into the larger purpose and process. It helps break employees out of a silo mentality, which keeps employees disconnected from the larger purpose of the organization. A good example is payroll, where the purpose is helping employees support themselves and their families, and save for the future, in exchange for the valuable labor they provide to the citizens of King County. It can be difficult to appreciate how important this work is when processing thousands of checks on payday, but a prominently displayed value stream map can remind employees that the work they do does indeed contribute to an important purpose.

Finally, explicitly describing the ways in which Lean practices fit with the organization’s larger vision, mission, and strategies gives employees a better sense of the big picture and their place in it. Exhibit 4 shows the State of Washington’s depiction of its Lean management system. Notice the way the concepts of autonomy and mastery are woven into the...
diagram, and then integrated with the organization’s purpose, as articulated by its mission, vision, values, goals, and its strategic business plan. Autonomy manifests as the drive to develop employees as problem solvers. Mastery is shown as continuously improving what agencies do. On the diagram, “daily work” is Washington’s term for standard work and encompasses tools that are very similar to King County’s visual controls, huddles, and value stream maps).

**LEAN’S IMPACT ON EMPLOYEE ENGAGEMENT**

The results from King County’s recent employee engagement survey indicate a strong link between Lean implementation and employee engagement. The results show how connected King County employees feel to their organization and how supportive they are in helping the county achieve its goals. Here are some results from the survey for the Finance and Business Operations Division employees:

- **Discretionary Effort.** 99 percent said they agreed or strongly agreed with statement: “When needed, I am willing to put in the extra effort to get a job done.” This is proof of employees’ willingness to give their “discretionary effort” or to go above and beyond the minimum required by their job description.
- **Sense of Purpose.** 91 percent said, “I understand how my performance contributes to fulfilling my work unit’s goals and objectives.” This shows a sense of purpose.
- **Pursuit of Mastery.** 89 percent said, “My work unit strives to provide high quality service to our customers/clients.” This shows that employees are pursuing mastery.
- **Sense of Autonomy.** 83 percent said, “I have a say in how I complete everyday job duties,” and 80 percent said, “I feel encouraged to share ideas to improve the way we work.” Both indicate a sense of autonomy.
The State of Washington Department of Enterprise Services also conducts formal employee engagement surveys and has seen significant improvements in engagement scores in the four years since Lean was adopted.11

THE CHALLENGES LEAN GOVERNMENTS FACE

While the examples presented so far are impressive and even inspiring, embracing Lean management has also created challenges for these governments. The foremost challenge is transforming the role of managers, and especially middle managers, from being the people who solve the problems to becoming coaches of problem solvers. Some managers are accustomed to seeing themselves as “the brains of the operation” who give orders for employees to carry out. If a manager’s sense of self-worth is rooted in this identity, changing it can be difficult. The Lean governments discussed in this article are all making progress in this area, but they all acknowledged it as their biggest hurdle.

For example, though many employees develop powerful ideas, sometimes the ideas are just not very good. If a supervisor simply shoots the idea down, it will dampen that employee’s enthusiasm for making contributions in the future and, in the worst case, discourage other employees as well. It is incumbent on supervisors to help employees refine their ideas or evolve them into something that will work. For example, an impractical idea might serve as inspiration for something more useful.

Another common challenge our Lean governments experience is the allure of Lean tools, like the A3 report. Lean tools are easy to use, intuitively appealing, and can deliver some immediate and satisfying results. However, Lean tools are a sort of fool’s gold. The governments interviewed for this article were adamant that the real benefit they have received from Lean has been primarily the result of engaging employees and changing the culture. The easy accessibility and immediate payoff created by the Lean tools can distract from the hard and long-term work of building a Lean culture and engaging employees in an authentic manner.

Finally, example governments pointed out that Lean is a journey — a long journey. Lean researcher and author Alan Robinson compares the work required to create a Lean organization to the work required to implement a new enterprise resource planning (ERP) system — an analogy that can be appreciated by many finance officers.12

CONCLUSIONS

Lean is a new way of working, and with any new way of working, effort will be required to make the transition. If your government is just beginning to implement Lean practices (or is only beginning to think about Lean), consider visiting another organization that has successfully navigated the process. The Lean journey of King County’s Finance and Business Operations Division, for example, did not start smoothly; there was progress, but there were also setbacks. The county’s finance director described his visit to a local manufacturer that had been using Lean for seven years as an inflection point in Finance and Business Operations Division’s journey because he came face to face with what he wanted for...
the division’s employees: people solving problems on their own, finding purpose at work, serving customers and citizens better, and, in the process, enjoying their time at work.


2. High School diplomas and bachelor’s degrees are about 3 times and 4.5 times more prevalent, respectively, in the U.S. population in the 21st century than in 1910. Illiteracy was about 8 times more common in 1910 than in the 21st century United States, according to data from an analysis conducted by the Russell Sage Foundation.

3. From an interview with Alan G. Robinson, Professor at the Isenberg School of Management at the University of Massachusetts and co-author of a number of books, including, most recently, The Idea-Driven Organization (Berrett-Koehler Publishers, 2014). Robinson, who cited this statistic from research he is conducting for a new book, pointed out that the statistic only applies to organizations that have fully embraced Lean.


8. The term “A3” comes from the size of the paper used for A3 reports — more commonly known as 11 x 17 paper.

9. A Gallup survey of more than 23,000 employees found that 37 percent had a clear understanding of what their organization is trying to achieve and why; 20 percent were enthusiastic about their team’s and their organization’s goals; 20 percent said they had a clear “line of sight” between their tasks and their team’s and organization’s goals; and 15 percent felt that their organization fully enables them to execute key goals. For similar statistics, see “State of the American Workplace,” Gallup, 2013.

10. Results are from a 2015 employee survey. The survey has a 77 percent response rate (151 out of 195 employees).

Achieving mastery starts with establishing the expectation that work will be improved in many small increments over time, which, when taken collectively, equal impressive gains.

11. Most recent survey has a 54 percent response rate (n=421 out of 780 employees). Examples of some of the most relevant findings include: “I have opportunity to give input on decisions that affect my work,” 13 percent improvement; and “I am encouraged to come up with better ways of doing things,” 11 percent improvement.

12. Robinson interview.

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Just Getting Started?