

Getting Started with Lean Government Projects



BY HARRY KENWORTHY

There is clear evidence that Lean is working in government — or at least that Lean tools are working. The impact of the Great Recession has led many state governments to pursue Lean, along with a growing awareness that there are wastes involved in the way government operates and serves its clients. The question now is not why we should implement Lean, but how we will integrate Lean fully into public management. This article addresses ways to get started with projects and hold onto the gains they create.

LEADERSHIP IS THE KEY

“Lean leaders” make successful, sustainable, organization-wide implementations possible. Much has been written about leadership being the key for any successful, sustainable major change initiative, and the leadership characteristics required for Lean generally align with those principles:

- Respect for people.
- Humility and willingness to recognize problems as opportunities.
- Focus on *what* is wrong, not *who* is wrong — on fixing problems and processes, not blaming people.
- Willingness to personally participate in Lean.
- Ability to model Lean thinking and behaviors for others

Looking for leaders who best display these characteristics is the best way to get started with Lean. Keep in mind that there are leaders at multiple levels in organizations, not just at the very top.

Provide training to the top management team first so they are able to model Lean behaviors for others and participate directly in Lean. Another approach is to do a demonstration project first, perhaps starting with a Lean leader and achieving some successes in that person’s unit to demonstrate Lean’s effectiveness. This project would then be followed up with top management training.

IDENTIFYING AND SELECTING LEAN PROJECTS

Once Lean training has been provided, the next step is to identify and select work areas or processes as candidates

for a Kaizen event. A Kaizen event is a dedicated period of time, up to five full-time days, when a small team identifies (and, ideally, begins to implement) opportunities for improvement. Selecting a Kaizen project can be based on factors such as:

- **Customer Impact.** Lean is about creating value for the customer, so choose processes that have the most potential to improve the customer experience.
- **Financial Leverage.** Some projects may offer clear financial returns. In state governments, it is quite possible to find projects with a minimum \$250,000 return for one week’s effort in a Kaizen event.
- **Pain.** Where is the greatest area of client/customer pain? What has the media been focusing on?
- **Upset Employees.** Where does the organization have poor morale, customer service problems, etc.?

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- **Greatest Concerns.** What’s keeping leadership up late at night, worrying?

Of the points listed, focusing on the client/customer instead of the government itself may require the biggest shift in thinking. This focus has important implications for how processes are designed and managed; however,

who the customer is or what the customer wants is not always as clear in the government environment as it is in the private sector. The Institute for Citizen-Centered Services 2005 Citizens First 4 Report surveyed citizens extensively to find five key drivers of client satisfaction:

- **Timeliness:** Satisfaction with the amount of time it took to get the service.
- **Knowledge:** Staff was knowledgeable.
- **Extra Mile:** Staff went the extra mile to help me get what I wanted.
- **Fairness:** I was treated fairly.
- **Outcome:** I got what I needed.

A government can use these points to frame a conversation about what the customers of its processes might value and how well the government is currently delivering that value.

Once some potential projects are identified, use a project charter to better frame each one. This step is particularly important in large organizations where many potential projects have been identified, and different leaders and sponsors are associated with different projects. Even in a small organization, the project charter is valuable because it creates a common focus and marching orders for the participants. Exhibit 1 shows a project charter, along with a brief explanation of what would appear in each section.

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Once the project charters are done, the next stage is to prioritize which projects to start with. A top management team or Lean steering committee should develop project selection criteria and well-defined scoring levels. Evaluate each project charter against the project criteria and prioritize the most highly rated projects for implementation. See Exhibit 2 for an example of a general selection grid.

Once the grid is developed, the criteria need to be flushed out with more specific definitions. For example, in this

Exhibit I: A Sample Project Charter

Project Name:				Location:			
Business Case:				Problem Statement:			
<p>Why is this project important to the organization's strategy, and what is the potential financial impact?</p>				<p>What is wrong, when/where does the problem occur, and what is the size and impact of the problem?</p>			
Project Scope:		IN:		Goal:		<p>Indicate the quantified results you expect to achieve by a stated date.</p>	
<p>Define the boundaries, constraints, and resources available to the team. Beware of creeping scope during the project.</p>				Expected Direct Benefits:		Target	
OUT:				<p>Projected cost savings.</p>			
				Expected Indirect Benefits:		Target	
<p>TEAM: Sponsor/Champion: Leader: Facilitator: Member: Member: Member: Member: Member: Member:</p>				<p>Other benefits — cycle time, error rates, reductions, etc.</p>			
				Total Benefits:			
				SPECIAL NOTES:			

Example 2: A Sample General Selection Grid

Request Projects	Strategic Importance/ Impact on Department Objectives	Financial Impact	Source of Customer Dissatisfaction	Visibility of Positive Results	Time to Implement	Resources Needed	Probability of Creating New Problems	Sum Across the Ratings
	5 Major 4 Significant 3 High 2 Moderate 1 Low 0 Very Little	5 Major 4 Significant 3 High 2 Moderate 1 Low 0 Very Little	5 Major 4 Significant 3 High 2 Moderate 1 Low 0 Very Little	5 Very Clear 4 Clear 3 Some Indications 2 Few Indications 1 Hard to See 0 Intangible	5 Almost Immediate 4 < 1 Month 3 1-2 Months 2 3-4 Months 1 5-6 Months 0 > 6 Months	5 Almost Nil 4 Few 3 Modest 2 Moderate 1 Considerable 0 Major	5 Very Low 4 Low Risk 3 Some Possibility 2 Moderate Possibility 1 Probable 0 Almost Certain	

sample grid, the Financial Impact column could be defined as follows: Major = \$1,000,000, Significant = \$500,000, High = \$250,000, Moderate = \$100,000, and Low = \$25,000. The other associated columns would also be developed to provide more specific definitions.

DATA COLLECTION

Many decisions around making improvements in government are based on opinions, but the foundation for improvement must be based on data and facts.

“In God we trust, everyone else please bring data.”

– W. Edwards Deming

There are two fundamental questions in data collection in government:

- 1. What Does the Customer/Client Really Care About?** In a motor vehicle department, for instance, the answer might be fast, accurate service.
- 2. How Are We Doing?** Do we have data and metrics that show us how well we are performing the services the customer/client really cares about? If we don't know how we are doing, then we don't have a starting point for determining whether something is a real priority, how we are going to improve it, or how much we did improve.

Collect data on the process selected for Kaizen before the event. The idea is to use techniques that take little time and can be applied directly at the work area by the employees who actually perform the day-to-day job. This never involves a sophisticated IT solution. The primary techniques for data collection are simple: check sheets, frequency plots, and concentration diagrams.

Check Sheets. These are simple grids that list the job activities, the frequencies at which those activities are performed, the amount of time they take, and so on. (see Exhibit 3).



Exhibit 3: A Sample Check Sheet

Action	<1 Minute	1–3 Minutes	3–5 Minutes	5–8 Minutes	8–12 Minutes	12+ Minutes
Form A				### ##		
Form B						
Form C			###	### ##	### ## ## ###	### ## ## ### ## ##
Form D						
Reject				### ##		
Rework					### ##	

The initial problem might be simply stated as: “It takes too long to complete all these forms.” Even in this simple example, we have now taken an amorphous activity and gathered some data. We can see that Form C clearly dominates in frequency, and, more importantly, in the amount of time taken. We can now focus our attention on Form C to better understand and determine the root causes and then develop an improvement strategy. We also see that there is rework activity, which previously may have been hidden.

Frequency Plots. A frequency plot is used for collecting data and displaying it as a picture that shows variation. Use a frequency plot with data such as types of undeliverable mail, types of phone calls received, and the amount of time required to respond to a customer request. Exhibit 4 shows an example of a frequency plot for a state DMV looking at interstate trucking renewal applications:

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Data are plotted daily by unit employees. The left side of the frequency plot shows the number of days from receiving the application to sending out the invoice, including how many applications were accepted (on the extreme left side). The goal is for the process to take fewer than five days,

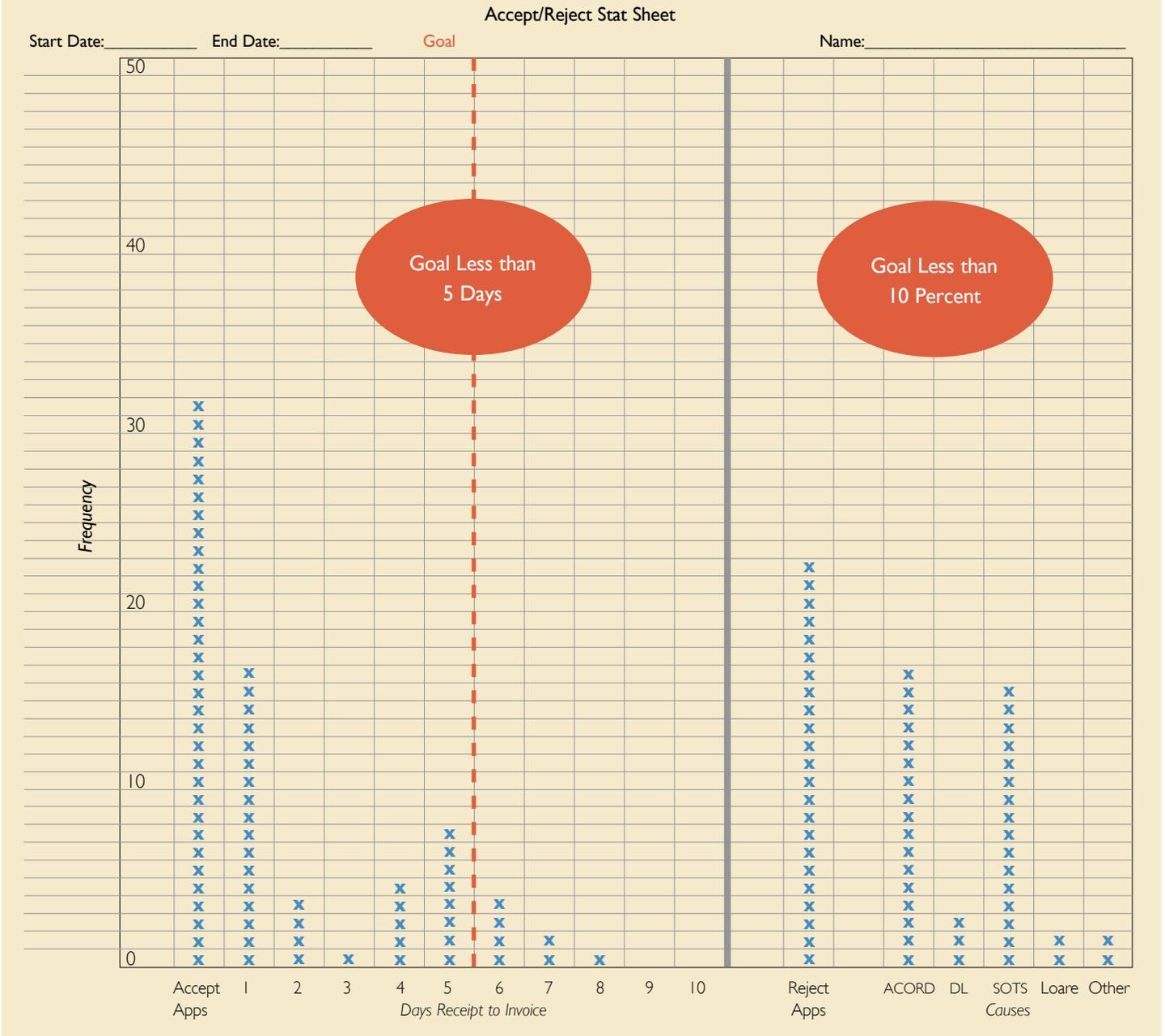
and the previous experience was an average of 18 days. The right side of the plot shows the number of rejected applications, along with the frequency of causes. The supervisor can easily compile this data each week and issue a performance report for the unit. This unit was able to reduce the number of employees doing these applications from five to three people and to reduce the time taken from 18 to two days. (As always with Lean, reductions in staff should be handled through attrition, not layoffs.) Not only was there excellent visibility and engagement by the employees involved, but unit employees who entered the data also came up with improvement ideas, leading to better, clearer instructions to truckers and a much better “call to action” on the instructions and associated notices.

Concentration Diagrams. A concentration diagram is a data collection form where the user records data directly on a picture of the object. In showing the type of defects and where they occur, concentration diagrams might reveal patterns and clusters. Exhibit 5 shows the highest concentrations of errors from the interstate trucking frequency plot example — the insurance forms. Now the agency can focus its improvements, emphasizing these problem areas on the

Evaluating Projects — Financially

Kaizen should always result in ideas that will generate cost savings or significant service improvements by reducing response times or increasing capacity. Keeping this in mind, assess Lean projects to determine whether the time spent on Lean is having its intended effect. A post-mortem on Kaizen cost versus savings will be invaluable for getting the most from Kaizen and making future Kaizen events more effective.

Example 4: A Sample Frequency Plot



form and doing more targeted outreach to insurance companies, trucking associations, and trucking companies.

Concentration diagrams have also been effective in areas such as:

- Determining which areas of the body are commonly injured in public works departments. The diagrams could be used as visual control to help raise staff awareness about these types of injuries.

- Tracking city crime data by type, location, and time of day so police patrols could be deployed more effectively.
- Tracking fire data by location, type of fire, age of population, and time of day, leading to a more aggressive fire prevention program and more outreach to the senior community.

A critical caveat in all data collection and analysis is that *the organization must have a good measurement system in place.*

Exhibit 5: A Sample Concentration Diagram

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NAME: XXXX-Name
ADDRESS: XXXXXXXXXX-Address

COVERAGE: CERTIFICATE NUMBER: XXXX-XXXX-XXXX-XXXX REVISION NUMBER: XXXX-XXXX-XXXX-XXXX

SPECIAL EVENTS:

DESCRIPTION	DATE	LOCATION	REMARKS

VEHICLES LISTED: XXXX-XXXX-XXXX-XXXX

CERTIFICATE HOLDER: XXXX-XXXX-XXXX-XXXX

CANCELLATION:

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a way the audience understands intuitively (e.g., using shapes, sizes, and colors to convey meaning).

- Kaizen Escalation Process.** If commitments are not being met, initiate a Kaizen escalation process. Action items for implementing needed improvements should be determined after a Kaizen event, including due dates and responsible parties. In many cases, however, the process owner will not have direct, formal authority over the person or unit responsible for a given action item. If an entity outside of the process owner’s influence fails to perform or deliver, the process owner needs to have a face-to-face discussion about the issue, and if that doesn’t resolve the problem, the process owner should ask the project sponsor to intervene. And if that doesn’t work, the entire executive management team or a Lean steering committee may need to become involved.

CONCLUSIONS

The keys to a successful start with Lean are leadership, Kaizen selection, data collection, and process ownership. Find leaders who embody the characteristics that best support a Lean transformation, and then train them to model the Lean philosophy. Processes can be identified as candidates for Kaizen based on factors like customer impact, financial impact, or perhaps just because they are causing the organization pain. In some cases, it might be necessary to have a method for formally documenting and prioritizing these opportunities. Kaizen will be much more productive if it is focused on specific aspects of the problem that offer the most potential leverage. Simple but elegant data collection procedures can be used to easily gather information to support the Kaizen event. After Kaizen, a single process owner should be designated to follow a series of standard tasks for holding onto the gains achieved. |

This fact is taken for granted, but most measurement systems are not repeatable, reproducible, reliable, and accurate. In many cases, projects are chosen for improvement only to find that the major problem is the measurement system itself.

HOLDING ONTO THE GAINS

At the conclusion of each Kaizen event, a single person needs to be responsible for carrying out the improvement (with assistance from others, as warranted). This person is the process owner, and he or she should complete the following standard tasks:

- Kaizen Newsletter.** Each Kaizen event will result in a series of action items that need to be completed. These items should be compiled into a document that describes who is going to do what, and by when. This is known as a Kaizen newsletter, and its progress should be updated monthly, without fail.
- Monitor Key Metric.** The project should have a metric that defines success. Process owners should develop, maintain, and prominently display the key metrics in

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