LEAN, WHAT IT MEANS TO STATE GOVERNMENT

Kate McGovern, MPA, Ph.D.
Associate Professor
NH Bureau of Education & Training
“Since I became Governor, I have focused on finding ways to make government work better for the citizens of New Hampshire.

By seeking to continuously improve the way we do business, we are able to offer better service to New Hampshire citizens - our customers - and to make better use of scarce resources. I applaud the use of 'Lean' and other techniques that have allowed state agencies to streamline processes, improve response times, and provide better service to the citizens and businesses of our state.”

Governor John Lynch
LEAN Process Improvement

Organized Common Sense

LEAN increases efficiency & decreases waste
- Using empirical methods to decide what matters, rather than uncritically accepting pre-existing ideas.
- Adding value to the customer
Tools & Philosophy

• Lean as a set of "tools" that assist in the identification and steady elimination of waste
  – As waste is eliminated quality improves while production time and cost are reduced.
• Lean focuses on the "flow" or smoothness of work.
How you think it is

How it really is

How it could be
Quantifying VSM Example

Demand:
25 Pizza Customers in line to order 25 large pies and 15 small pies.

Capacity:
2 pizza makers on duty

Staff Time:
3 Minutes
VA: 2 Minutes (to shape dough)
NVA: 1 minute (showing off)

Cycle Time of Open Oven step:
0.5 minute from end of Sprinkling to having oven door completely open

Cycle Time of Remove Pie step:
10 minutes from end of Close Oven to Removing Pie from oven and having it ready for slicing

Inventory:
2 pizza makers for three hours
40 large dough balls, 20 small dough balls 2 gallons of sauce and 3 lbs of cheese on hand.

Capacity:
1 ladle

Capacity:
Oven fits 6 large pies or 9 small pies

Change-over Time:
15 seconds to put on oven mitt and walk from prep-table to oven

Pizza Chef’s LEAD TIME: From Dough Toss to Slicing the Pie
7 Areas of Waste in Administration

- Waiting & searching time
- Processing errors
- Unnecessary activities
- Double handling
- Information loops
- Excessive control and approval process

Source: DHHS Project Manual
Faster, Better, Cheaper

• Typically, businesses trying to speed up production must pay more, or produce an inferior (rushed) product, or both.
  – If you need it fast, you have to pay more, or be prepared to trade off quality for speed.

• LEAN combines methodology with philosophy to do all three: get things done faster, better & cheaper.
HERE is Edward Bear, coming downstairs now, bump, bump, bump, on the back of his head, behind Christopher Robin.

It is, as far as he knows, the only way of coming downstairs, but sometimes he feels that there really is another way, if only he could stop bumping for a moment and think of it.

From A.A. Milne’s Winnie the Pooh Series
Vantage Point
The people who do the work are on the Lean team

- Responsibility & Empowerment
  - No more “they won’t let us”
  - “They” → “We”

- Quality is everyone’s responsibility
- Workers have ownership
- Management has trust
The 5 Whys
Lean Process Improvement

- Minimizes the resources required to deliver a service by eliminating waste (non-value added activities) that increase costs, lead and cycle times and inventory requirements.

- By examining a process with the objective of reducing its number of steps, an organization will gain speed of delivery and reduce risks to quality thereby improving customer satisfaction.
Elements of a Charter

✓ Indicate sponsorship
✓ Identify and describe the process to be improved
✓ Clearly identify the bookends (scope)
✓ Describe the problem to be solved
✓ Establish preliminary goals
✓ Identify the customers of the process
✓ Identify the team members
✓ List the resources authorized for the project team
✓ Identify decision-making authority of the team and expectations of each role
Value Stream Mapping

Department of Administrative Services - Bureau of Public Works

LEAN VSM: Consultant Selection Process

Swim Lanes

Agency Submits Request for Work Authorization

Hand Off

Decision

BPW Receives RWA

BPW Confirms RWA, Valid for Appropriation

BPW Confirms Appropriation, Funding Details

In Order

BPW Work w/Agency to Resolve

BPW Accepts RWA, Assigns Project

Steps

Decision

Alternative Paths

Idea:
Can posting duration be pre-assigned upon passage with review during CMTs of Conference Phases?

Idea:
Central BPW Email Box instead of personal

Ideas & Assumptions are captured along the way.
Gwinnet County’s Department of Financial Services Embraces Lean –

Richard Reagan, Director of Strategic Business Development in the Finance Department. (p. 10-16)

Eight Sources of Waste and How to Eliminate Them: Improving Performance with Lean Management Techniques –

Shayne Kavanagh & David Krings (p. 18-24)
Lean is an organizational performance management system characterized by a collaborative approach between employees and managers to identify and minimize or eliminate activities that do not create value for the customers of a business process, or stakeholders.

(Kavanagh & Krings, p. 19)
Projects in the Gwinnett County’s Dept of Financial Services

Twelve successful projects, including

• Tax Returns: Processing time cut in half
• Residential appeals: Reduced 14 steps to 6; processing rate went from 65/day to 209/day
• Fleet management: reduction of 35 steps to 16

As of October 2011, 8 project charters were being drafted for action within 180 days.
Transport & Waiting

Suboptimal office layout and task assignments contribute to waste.

- Is staff well positioned to greet customers and perform assigned tasks?
- Are frontline staff empowered to help customers or are customers waiting to be handed off to another section for the next step in the process?
A *turbo-charged bad process*?

If technology is applied to a situation that uses people ineffectively, or if process design is less than optimal, technology will, at best, help save some time, or, at worst, help the organization do the wrong things faster...

(Kavanagh & Krings, p. 20)
The Lean Philosophy

Many people associate Lean with tools for mapping business processes, identifying improvement, and charting progress. However, Lean is an attitude and philosophy about continuous improvement and striving for a state of perfection where every action created value for customers and citizens. Perfection is an unobtainable idea, of course, but the Lean organization is always looking for ways to do things better.

(Kavanagh & Krings, p. 19)
Over-processing Waste

- Over-produced reports (too long, too elaborate?)
- Copying more people than necessary?
- Making unnecessary rules?
Inspection & Checking

• A process should produce reliable results the first time work is performed. Hence, inspection (or double-triple-quadruple) checking is a potential form of waste.

• Ex) requiring 4 signatures is likely to add more in cost to the purchasing process than creating value – it might be destroying value if multiple checkers feel they can relax because there are so many other checkers.
Compliance Pyramid

- Fail Safe
- Visual and Audible Control Tools
- Visual Aids
- Procedures, Instructions & Manuals

Only one way to do it

Graphical instructions

Warning when a variation occurs

Written controls

Lean in the Public Sector
Three Types of Customers

• The Citizen – wants satisfaction, fair treatment, accuracy & timeliness
• The Governing Body (City Council or Legislature) – want satisfied citizens and assurance that the process protects against risk from fraud and abuse
• Other Departments – Want accurate, timely and courteous interactions

(Kavanagh & Krings, p. 19)
Identify your Customer

The **customer** for the process you have selected is the end user - at the final step of the process boundary you have established for this project.

You also have internal customers at each step of the process, as the work is passed forward.
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(Kavanagh & Krings, p. 19)
The MS–1 Lean Process

1. The first step was to map our current process.

2. We identified areas where the holdups were occurring.

3. We reviewed the entire process to determine the number of “stops” and manual reviews each form was receiving.
ACCOMPLISHMENTS

- Created a “smart form”
- Eliminated data entry
- Improved data accuracy
- Increased quality control
- Provides cost saving by eliminating mailing expense
Start with the easy stuff – get some quick victories

The opportunities of process based improvement in the public sector have been described not as “low hanging fruit but apples on the floor”

Future State Report to Sponsor

• Review your Charter – what were you authorized to do?
• Is the Team’s Future State within the scope of authorized work?
• Do you want to propose an Ideal Future State & Interim Future State?
• Do you want to recommend multiple options for timing or scope of the implementation?
• Resource considerations?
Lean – Payroll 7/27-8/2 2010

As Monty Hall would say ....

Let's Make a Deal!

We propose 3 different tiers/options for you to consider

Curtain # 1
Curtain #2
Or
Curtain #3
Communication Plan

Share information on status of project activities, lessons learned and critical dependencies to ensure success. The Communication Plan includes:

– The type of information to be produced
– With whom the information will be shared
– When the information will be shared
– Mechanisms for the project team and stakeholders to provide feedback to project management.
7/30/60/90 Day Reviews

Project Team meets with the Sponsor to confirm that deliverables are on target.

Value stream manager or Lean facilitator reports the progress to the agency’s Lean coordinator

*Celebrate each milestone*
• NH unemployment compensation appeals increased from 522 in May 2008 to a **backlog of 2,762** in 2010.

• Average age of a pending appeal went from 26.3 days to **163.6 days**.

• By the end of 2010, NH ranked **last** in the country for case aging.
Results

- Beginning March 2011, NH met federal time lapse standards for the first time in 2 years.
- Average age of a pending appeal was reduced from 163.6 to 18.4 days.
- At the end of 2011, NH had moved from 50th to 16th nationally for case aging.
Quarterly Meetings
E-Studio Forum
http://Lean.nh.gov
NH Bureau of Education & Training’s

Continuous Improvement Practitioner (CIP) Program

• Introductory class
• Lean Facilitator Training
• Lean Change Management
• Practicum: 2 Days of Facilitation
<table>
<thead>
<tr>
<th>Pre-Training</th>
<th>Day One</th>
<th>Day Two</th>
<th>Day Three</th>
<th>Post-Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify Sponsor, Facilitator(s)</td>
<td>Introduction to Lean</td>
<td>Complete</td>
<td>VSM Draft</td>
<td>Team Meets to prepare plan &amp; report to Sponsor – confirm Future Stream Map and Final Charter</td>
</tr>
<tr>
<td>Select Team</td>
<td>* Chartering</td>
<td>• Steps/Order</td>
<td>• Steps/Order</td>
<td>• Team presents plan to Sponsor for approval of charter/plan implementation.</td>
</tr>
<tr>
<td>Draft Charter – (see attached directions)</td>
<td>* VSM</td>
<td>• Decision Points</td>
<td>• Decision Points</td>
<td>• Decisions on timeline for action, deliverables &amp; 30/60/90 day reviews.</td>
</tr>
<tr>
<td>Facilitator meets with Project Manager</td>
<td>* Kaizen</td>
<td>• Feedback Loops</td>
<td>• Feedback Loops</td>
<td>• Measure results, communicate and celebrate</td>
</tr>
<tr>
<td></td>
<td>Introduce Value Stream Mapping</td>
<td>• Swim Lanes</td>
<td>• Dependencies Tabulating Data Implementation Plan - including follow-up &amp; Communication Plan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Begin mapping the Wrap-up</td>
<td>• Ideas &amp; Assumptions</td>
<td>Recorder: Capture Future State VSM in flow chart. Calibration meeting</td>
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<tr>
<td></td>
<td>Optional: Calibration meeting – the facilitator &amp; Project manager meet with the Sponsor</td>
<td>• Data Sheets</td>
<td>Calibration meeting</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Introduce Methods Recorder: Capture Current State VSM in a flow chart.</td>
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</tr>
<tr>
<td>Sponsor Driven</td>
<td>Facilitated</td>
<td>Facilitated</td>
<td>Facilitated</td>
<td>Project Manager Driven</td>
</tr>
</tbody>
</table>
Welcome to Public Great

WHY WE'RE HERE:
The work of government is noble
The people in government are amazing
The systems of government are a mess

http://www.governing.com/blogs/public-great