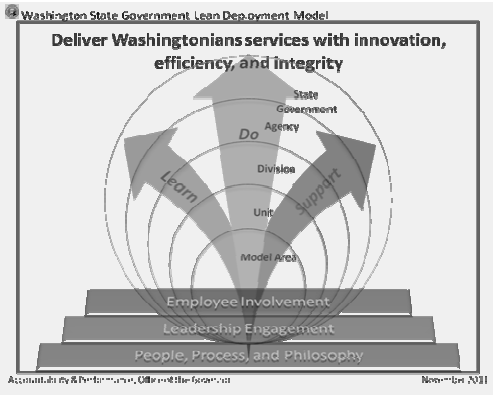
Welcome

Lean Overview



FMAC Technical Training April 26, 2012

Notes: 1

Instructor:
Eden Teachout
Office of the State HR Director, OFM
eden.teachout@ofm.wa.gov
(360) 664-6242

Housekeeping

- Emergencies
- Bathrooms
- Breaks
- Food/drinks

Notes: 2

Class At-a-Glance

1	2	3	4	5
Introduction	**Understanding Lean Basics**	**Lean Culture**	**Panel Discussion**	**Wrap Up**
• Objectives	• Lean Definition	• PDCA	• Agriculture	• Summary
• History	• Value of Lean	• Root Cause Analysis	• Corrections	• Evaluations
• Lean in Washington	• Core Lean Concepts & Tools	• Lean vs. Traditional Culture	• Financial Institutions	• Departure

Notes: 3

Purposes of course:

1. Provide a basic understanding of Lean terms and tools
2. Prepare you to use Lean tools at work to improve processes and increase capacity

Section 1

INTRODUCTION

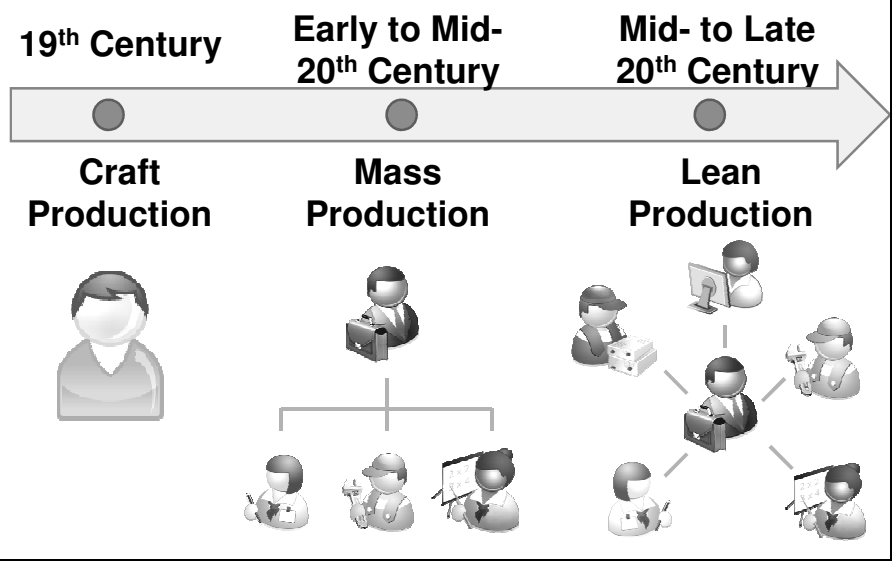
Notes: 4

Objectives

- Define Lean
- Discuss why Lean is of value to state government
- Explain how Washington state is adapting Lean
- Recognize, understand, and use basic Lean terms and tools

Notes: 5

History of Lean



Notes: 6

Craft production: Design and build to customer's specifications

Mass production: Design and build done apart from each other, which led to a separation between management and labor, and an organizational structure based on functions

Lean Production: Design and build (and other functions) coordinated via product/service teams that create efficient end-to-end processes

Lean in Washington

"The best solutions to our problems come from those on the line everyday seeing what works and doesn't work and how to fix it and how to solve it."

"Lean gives us the opportunity to do more with what we have."

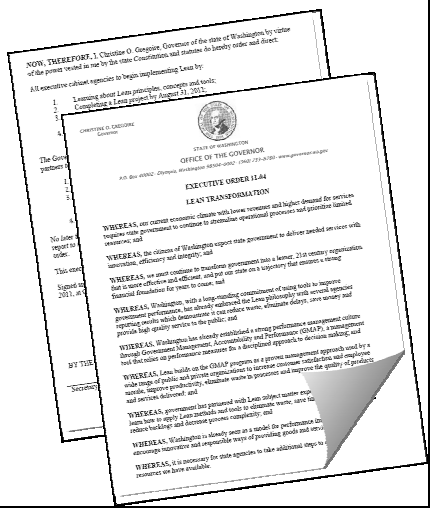
--Governor Gregoire,
Lean Symposium 3/24/11

Notes: 7

Lean in Washington

Executive Order 11-04
Lean Transformation

- Learn About Lean
- Build Capacity for Lean
- Embed Lean Thinking in the agency culture
- Complete a Lean project
- Report Lessons Learned and Results by August 31



NOW, THEREFORE, I Christine O. Gregoire, Governor of the state of Washington by virtue of the powers vested in me by the state Constitution and statutes do hereby order and direct:

All executive cabinet agencies to begin implementing Lean by:

1. Learning about Lean principles, concepts and tools;
2. Completing a Lean project by August 31, 2012.

STATE OF WASHINGTON
OFFICE OF THE GOVERNOR

EXECUTIVE ORDER 11-04

LEAN TRANSFORMATION

WHEREAS, our current economic climate with lower revenue and higher demand for services requires state government to continue to streamline operational processes and prioritize limited resources; and

WHEREAS, the citizens of Washington expect state government to deliver needed services with innovation, efficiency and integrity; and

WHEREAS, we must continue to transform government into a leaner, 21st century organization that is more effective and efficient and put our state on a trajectory that ensures a strong financial foundation for years to come; and

WHEREAS, Washington, with a long-standing commitment of using tools to improve government performance, has already embraced the Lean philosophy with several agencies reporting results which demonstrate it can reduce waste, eliminate delays, save money and provide high quality service to the public; and

WHEREAS, Washington has already established a strong performance management culture through Government Management, Accountability and Performance (GMAP), a management tool that relies on performance measures for a disciplined approach to decision making; and

WHEREAS, Lean builds on the GMAP program as a proven management approach used by a wide range of public and private organizations to increase customer satisfaction and employee morale, improve productivity, eliminate waste in processes and improve the quality of products and services delivered; and

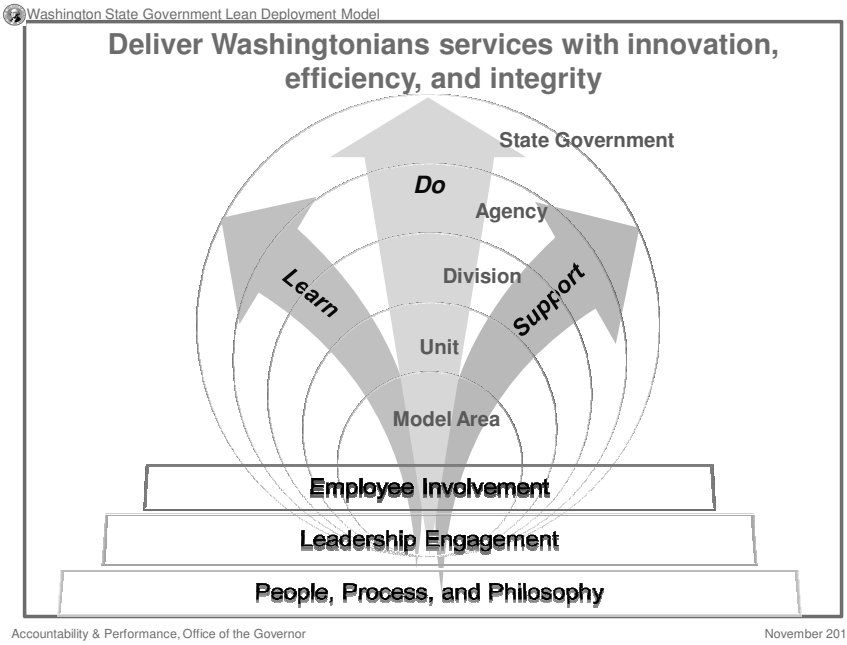
WHEREAS, government has partnered with Lean subject matter experts to learn how to apply Lean methods and tools to eliminate waste, save time, reduce backlogs and decrease process complexity; and

WHEREAS, Washington is already seen as a model for performance in [illegible] encourages innovative and responsible ways of providing goods and services; and

WHEREAS, it is necessary for state agencies to take additional steps to [illegible] resources we have available.

Notes: 8

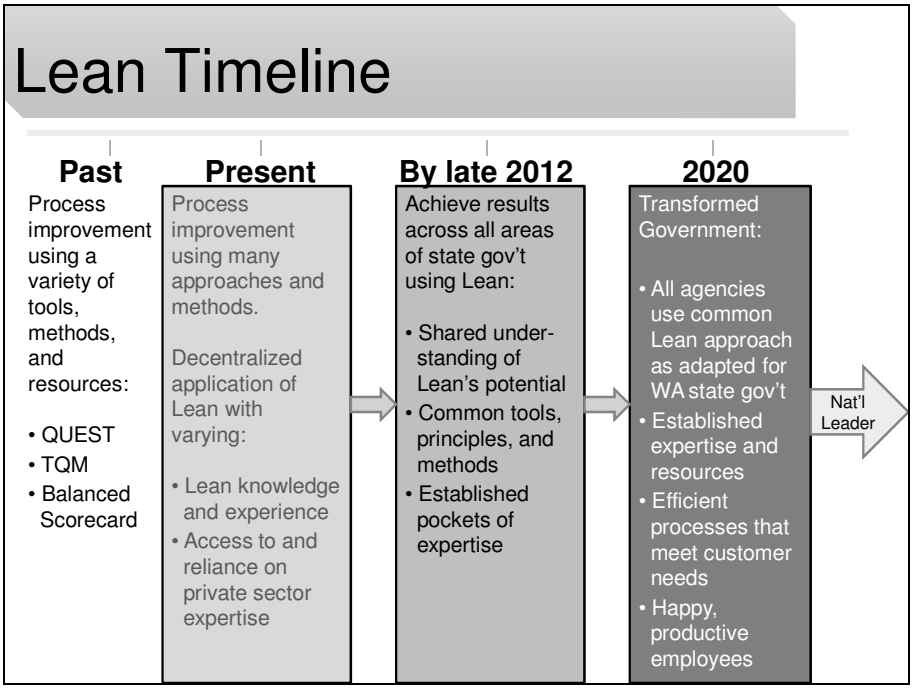
The Governor's Office of Accountability and Performance is coordinating support for the Executive Order



Notes: 9

The ultimate goal is "The Washington State Way" of doing business:

- A common approach to continuous improvement with shared thinking, tools, and techniques



Notes: 10

We're on a multi-year journey to adapt Lean to state government

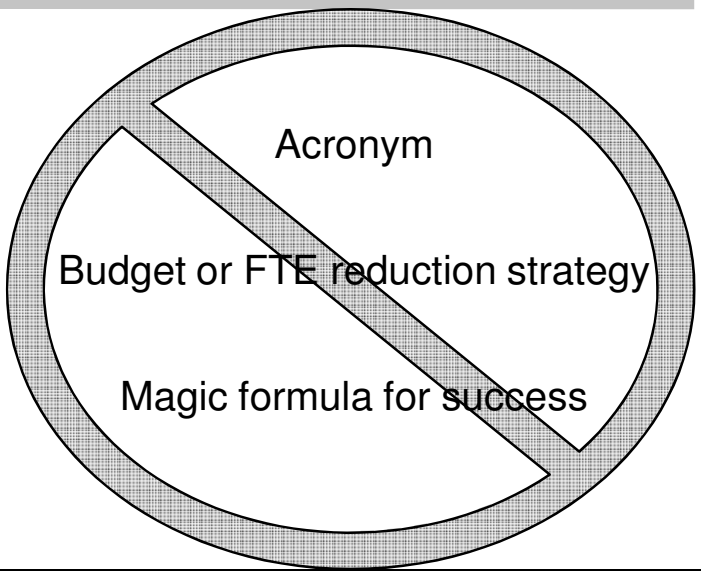
Section 2

UNDERSTANDING

LEAN BASICS

Notes: 11

Lean Definition



Notes: 12

Organizations *adapt*, rather than adopt, Lean

Lean Definition

Business term

Set of tools that maximize value and minimize waste

Way to think – a philosophy for an entire organization

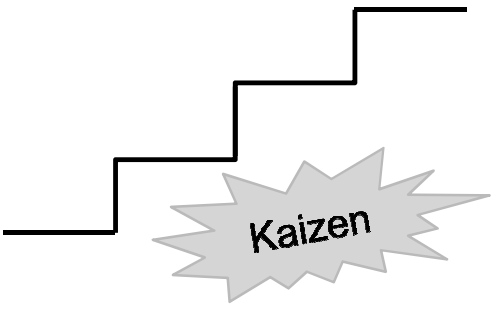
Notes: 13

Lean Definition

A **systematic** way to

identify and eliminate **waste** through

continuous improvement



Notes: 14

Systematic: recipe to help you avoid pitfalls

Removal of waste: creates efficient process that create what the customer wants, when they want it, error-free

Continuous improvement: keep doing it again and again

"A 30% improvement today is better than a 100% improvement tomorrow"

Why is Lean of value?

- Allows staff to do their best every day
- Improves customer experience
- Increases efficiency and capacity
- Encourages problem-solving

The Lean approach respects people and honors their contributions

Notes: 15

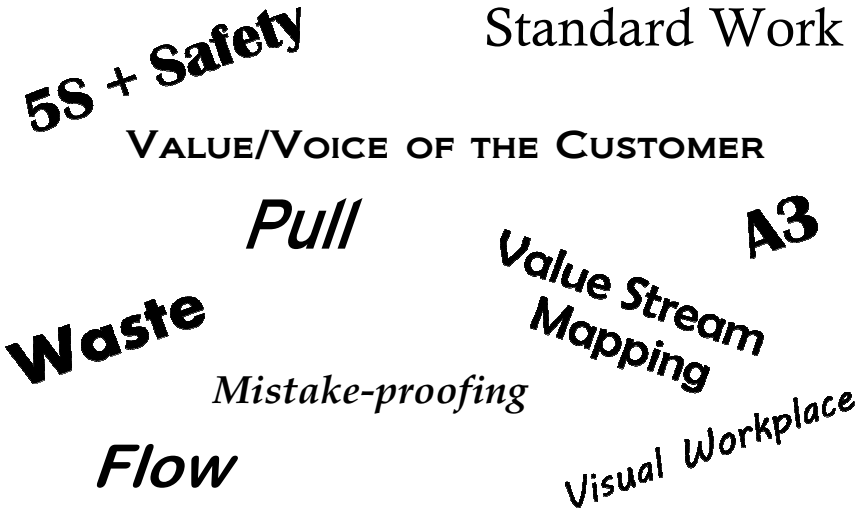
Lean Culture

Lean is more than just tools…

- People operate without fear
- Management creates time for Lean efforts
- Employees turn to the Lean tools without prompting
- Everyone feels ownership of a process

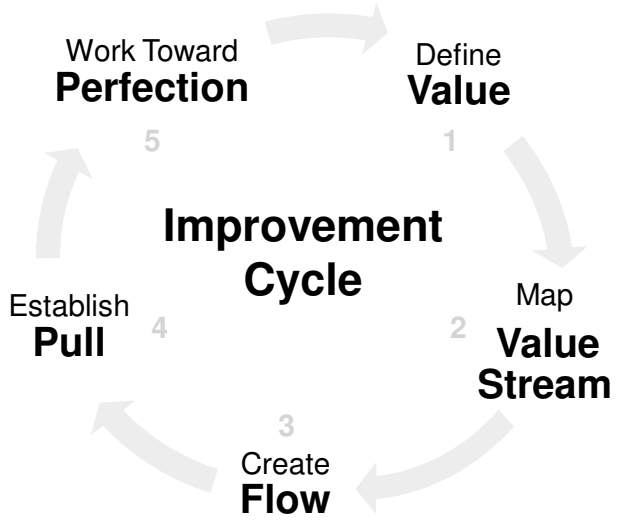
Notes: 16

Core Lean Concepts & Tools



Notes: 17

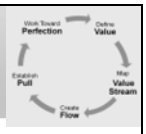
Lean Improvement Cycle



Notes: 18

It all begins with value, which must be defined by the customer

Defining Value



Who is your customer?

_____

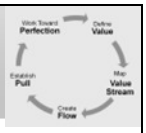
_____

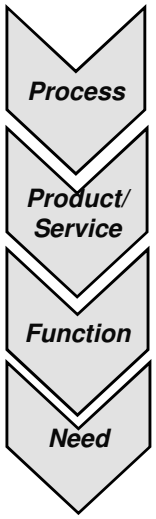
_____

_____

Notes: 19

Defining Value





Produces a ***product/service***.

Performs a ***function***.

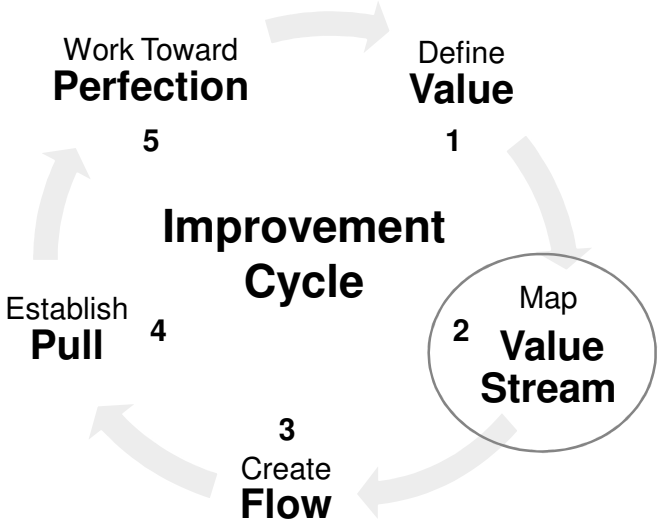
Meets a ***need***.

Met need = **Value**.

Notes: 20

Have the crucial conversations about who the customer is and what value you provide

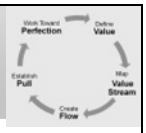
Lean Improvement Cycle



Notes: 21

Be the thing!

Value-added Work



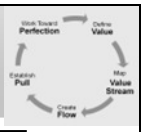
1. Changes the form, fit, or function of the product or service
2. Is something the customer is willing to "pay for" (in time, effort, money, etc.)
3. Is done right the first time

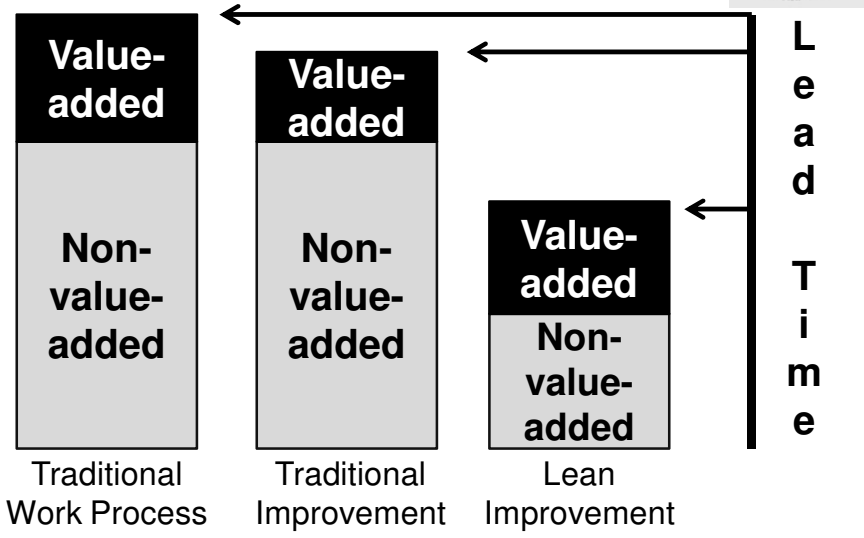
Notes: 22

Any work that doesn't meet the criteria above is non-value-added

Note: some non-value-added work is necessary

Value-added Work

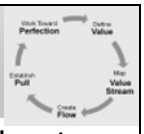




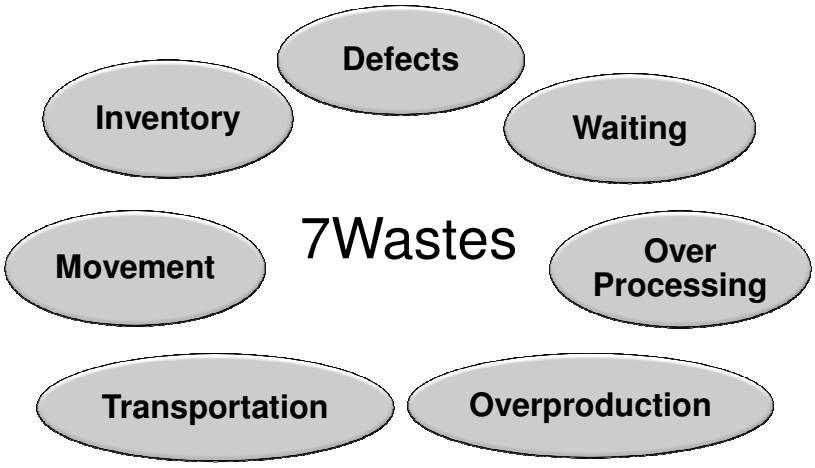
Notes:

Lean efforts reduce lead time by eliminating non-value-added work

Waste (Non-value-added)



Anything that adds time, cost, or resources without adding value, as perceived by the customer.



Notes:

Defects: errors that create a product which doesn't meet the need

Waiting: time that a product sits idle in the process

Overprocessing: expending more effort on a product than is needed

Overproduction: making a product for which no one has asked

Transportation: moving physical items from one place to another

Movement: human motion

Inventory: physical items and/or the sum of all tasks to be completed

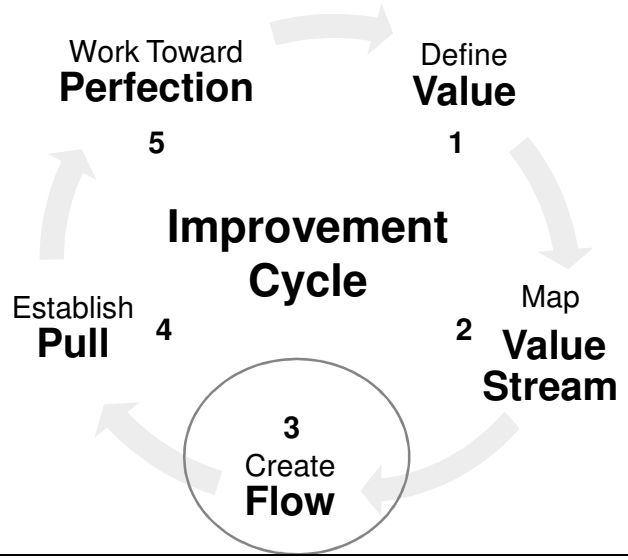
Mapping the Value Stream

Notes: 25

Real value stream maps detail:

- Each step in the process
- How much time is spent touching the product or service
- How much time the product or service waits
- The defect rate
- Other measures of quality, quantity, etc.

Lean Improvement Cycle

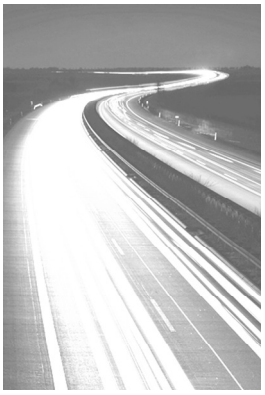


Notes: 26

Flow is a steady sequence of activities that add value

Flow

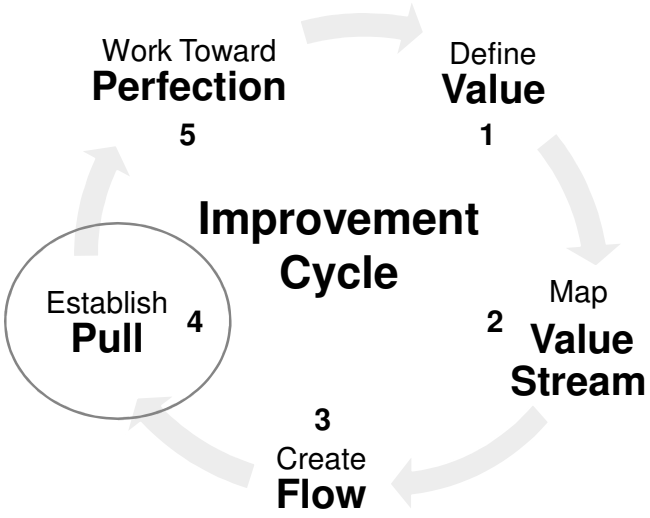
1. Work in process is a known, fixed level
2. Scheduling is predictable
3. The product or service moves quickly and continuously through the system



Notes: 27

You can feel flow – it's when you're "in the zone" and things are running smoothly

Lean Improvement Cycle



Notes: 28

Pull: no one upstream produces anything until the customer asks

Pull vs. Push

Pull: Sending work to the next role when they are ready for it

Push: Sending work to the next role whether they are ready for it or not

Notes: 29

Pull systems:

- Help control work-in-process
- Help you allocate resources based on actual demand

Kanban

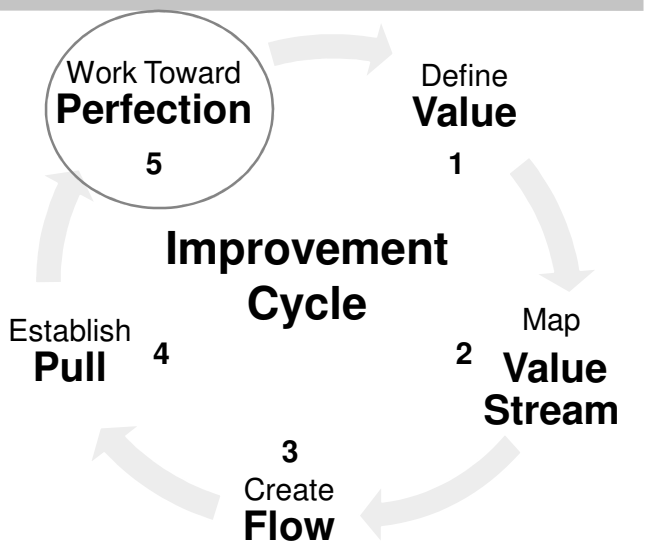
- Literally, sign or signboard
- A visual signal that instructs one to produce or supply something
- Can use kanbans to establish acceptable min/max quantities at each step in the process

Notes: 30

Kanban systems can be used:

- To replenish *supplies* based on consumption
- In conjunction with first-in-first-out (FIFO) lanes to replenish *work* based on consumption

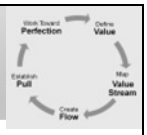
Lean Improvement Cycle

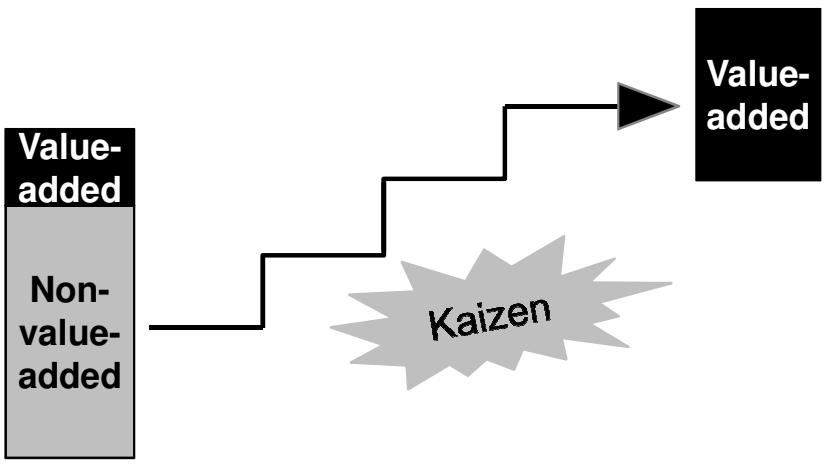


Notes: 31

Lean is continuous – you will find more layers of waste each time you look

Perfection





Notes: 32

The theoretical end point is perfection – where every action adds value for the customer

5S+Safety

Notes: 33

5S + Safety is a recipe that can be applied to work spaces, electronic storage systems, work processes, and more - even your home

Goals of 5S + Safety:

Sort – you have exactly what you need to do work
Simplify – it is quick and easy to access what you need to do work
Sweep – achieve/maintain a "normal" that makes problems obvious
Standardize – everyone uses the same, best way to do work
Self-discipline – everyone does their part to maintain the "normal"
Safety – everyone is safe while doing work

Standard Work

The safest, easiest, most effective way of doing something that we currently know

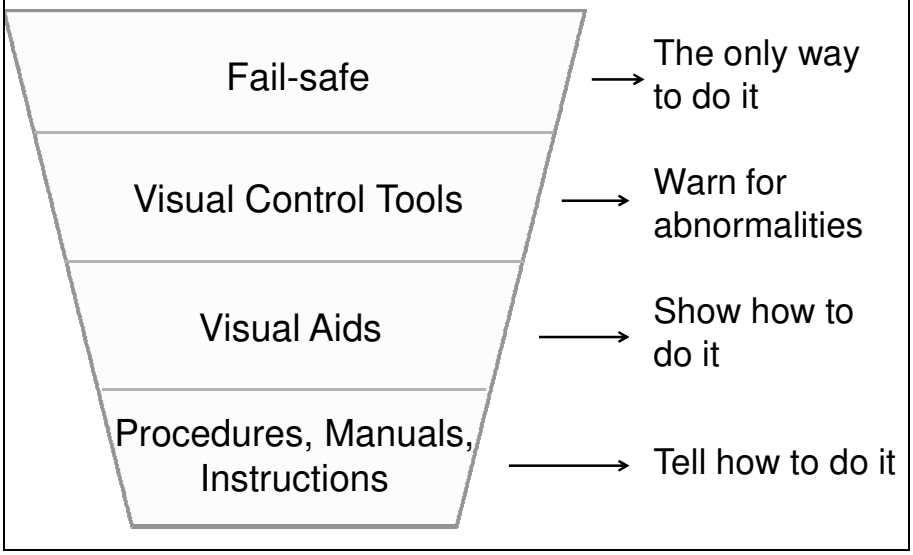
Benefits:

- Provides baseline for improvement
- Enables more predictable results
- Simplifies on-boarding and cross-training
- Fosters organizational learning

Notes: 34

Those closest to the work (line staff) should design standard work

Tools for Standard Work



Notes: 35

Tools are in order from most to least effective

The best mistake-proofing devices:

- Apply to 100% of products or services
- Contain little or no text; instead, they use photos or images
- Require no interpretation
- Are available at the point of use
- Are maintenance-free

Section 3

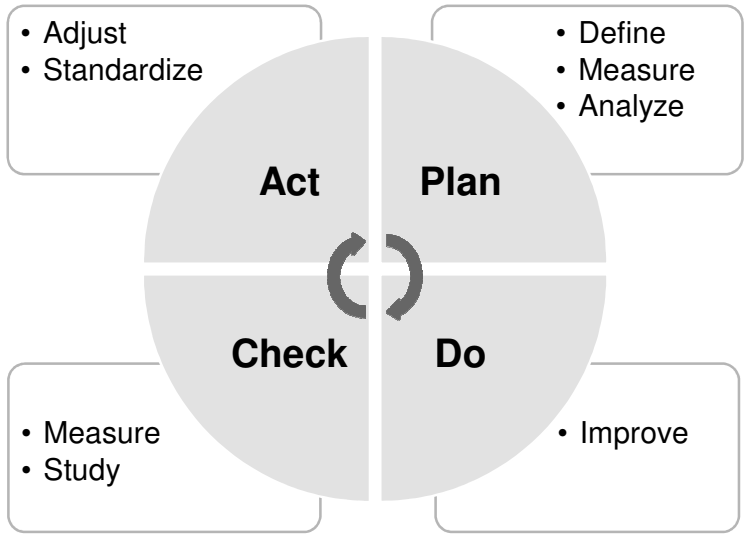
LEAN CULTURE

Notes: 36

A true Lean culture is a problem-solving culture

Every employee looks for and addresses problems using the scientific method

Plan-Do-Check-Act (PDCA)



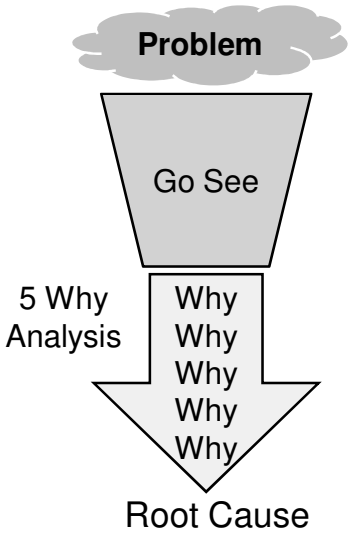
Notes: 37

PDCA is the scientific method for problem-solving. At each step:

- See the big picture
- Identify which parts of the big picture need investigation
- See what is actually happening
- Identify what should be happening

PDCA is at the heart of every Lean activity, and is something every Lean manager practices and teaches

Root Cause Analysis



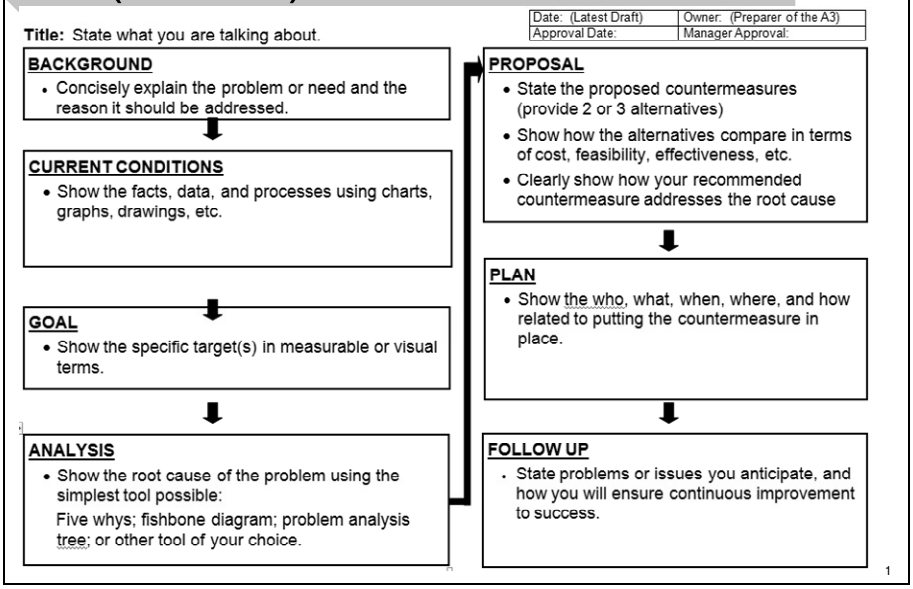
- Identify the specific problem
- Go see what actually happens
- Compare it to the standard or ideal
- Ask 'Why?' until the root cause is found
- Ask 'How can we prevent it?'
- Identify countermeasure(s)

Notes: 38

A root cause analysis helps you bypass the symptoms and surface solutions, and get to the underlying cause

"5 Whys" is just one method of root cause analysis

A3 (11x17)



Notes: 39

Use more pictures, fewer words

A3s expedite decision-making and bring people up to speed on issues quickly and easily

Lean vs. Traditional

Lean	Traditional
▪ Simple and visual	▪ Complex
▪ Management by sight	▪ Management by status report
▪ Pull System	▪ Push System
▪ Inventory as needed	▪ Just-in-case inventory
▪ Reduce non-value added	▪ Speed up value-added work
▪ Single item or small lot size	▪ Batch production
▪ Minimal lead time	▪ Long lead time
▪ Quality built in	▪ Quality inspected in
▪ Value stream managed	▪ Functionally managed

Notes: 40

Above all, Lean is about:

- Continuous improvement
- Respect for people

Lean Culture

- People trust each other
- Management facilitates
- Everyone participates
- Customer-focused
- Problem-solving is process-oriented

Notes: 41

In Lean cultures, staff ask:

- How do I know that what I am doing meets the customer's needs?
- Am I accepting, creating, or passing on defects?

Section 4

PANEL DISCUSSION

Notes: 42

Panel Members:

- Patrice Barrentine, Agriculture
- Jim Dunivan, Corrections
- Ariana Wood and Patrick Woods, Financial Institutions

Panel Moderator:

- Darrell Damron, Governor's Office of Accountability and Performance

Section 5

WRAP UP

Notes:

For more information about resources:

- http://www.accountability.wa.gov/leadership/lean/resources.asp

Title: State what you are talking about.

Date: (Latest Draft)	Owner: (Preparer of the A3)
Approval Date:	Manager Approval:

BACKGROUND

- Concisely explain the problem or need and the business reason it should be addressed.

CURRENT CONDITIONS

- Show the facts, data, and processes using charts, graphs, drawings, etc.

GOAL

- Show the specific target(s) in measurable or visual terms.

ANALYSIS

- Show the root cause of the problem using the simplest tool possible:

  Five whys; fishbone diagram; problem analysis tree; or other tool of your choice.

PROPOSAL

- State the proposed countermeasures (provide 2 or 3 alternatives)
- Show how the alternatives compare in terms of cost, feasibility, effectiveness, etc.
- Clearly show how your recommended countermeasure addresses the root cause

PLAN

- Show the who, what, when, where, and how related to putting the countermeasure in place.

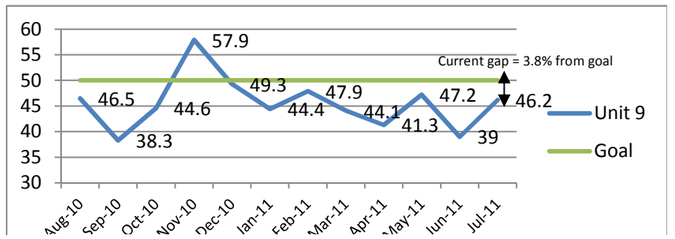
FOLLOW UP

- State problems or issues you anticipate, and how you will ensure continuous improvement to success.

Theme: Identify and resolve issues preventing claims units from closing 50% of their claims within 180 days. **Date:** October 20, 2011 **Author:** Jamie Scibelli

1. Problem Identification

Unit 9 Results – Timeless Claims Closed Within 6 months

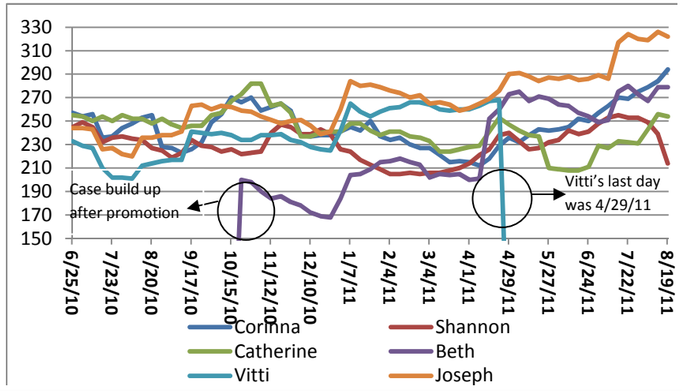


Goal: Unit 9 implemented process improvements in October 2010. The goal is to close 50% of claims within 180 days to decrease the risk of disability for injured workers and decrease experience ratings for employers.

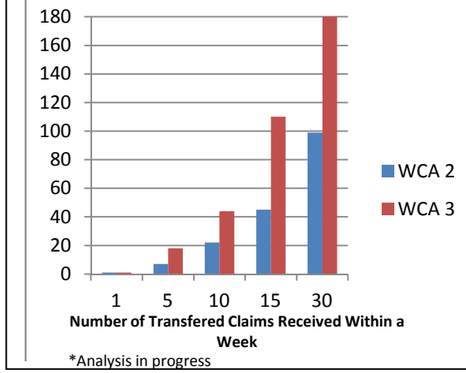
Current: The unit exceeded their goal of 50% in the 2nd month. However, the percent of claims closed has fluctuated since then and the unit has not been able to reach the goal since. In addition, the average resolution rate since implementation is 46.2%, 3.8% from the goal.

2. Problem Breakdown

A. Unit 9 Staff Caseloads



D. Estimated Days to Complete a Full File Review* in a Batch

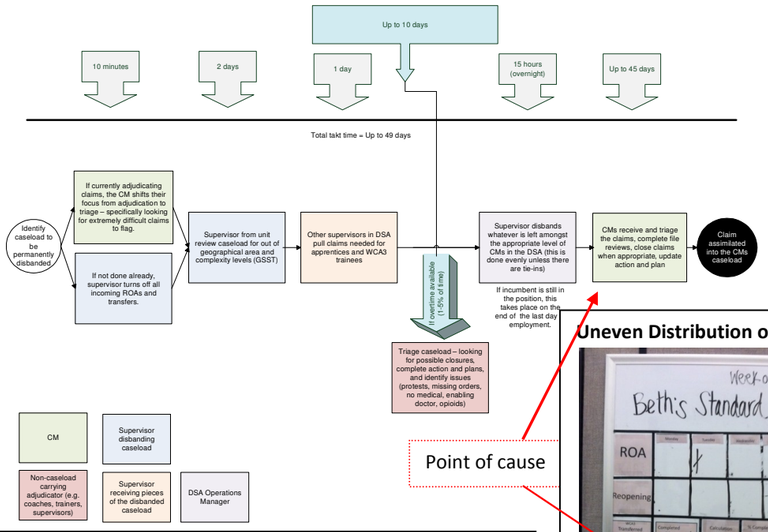


*Analysis in progress

B. DSA 3 Caseload Disbandments

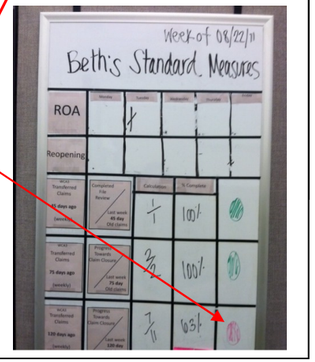
Level	Date	Number of claims
WCA 2	8/2011	23
WCA 2	8/2011	29
WCA 2	8/2011	89
WCA 2	8/8/11	82
WCA 3	8/ 2011	213
Appr.	7/19/11	257
WCA 3	7/2011	72
WCA 3	7/2011	279
WCA 2	6/2011	27
WCA 3	4/30/11	232
WCA 3	4/19/11	81
WCA 3	4/18/11	168
WCA 2	4/15/11	186
WCA 2	2/16/11	184
WCA 3	1/5/11	202
WCA 3	12/29/10	245
WCA 2	10/16/10	174
Appr.	9/23/10	117
WCA 3	9/17/10	263
WCA 3	8/14/10	222

C. Disbandment Process - Point of Cause



Point of cause

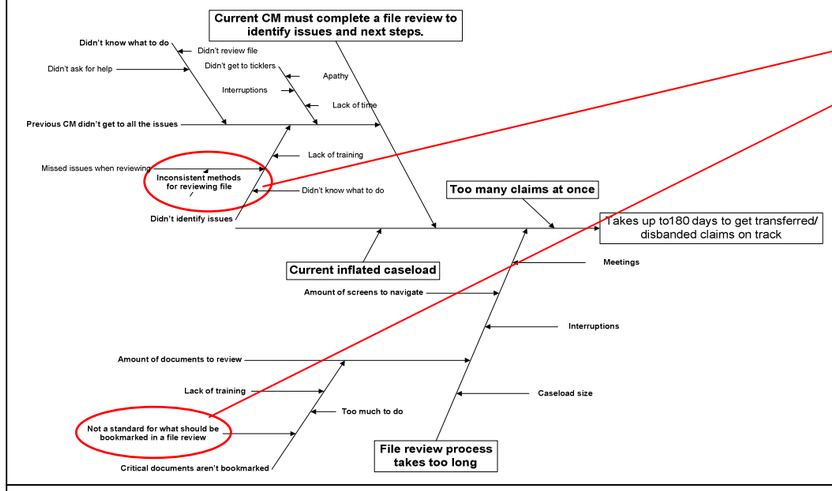
Uneven Distribution of Claims

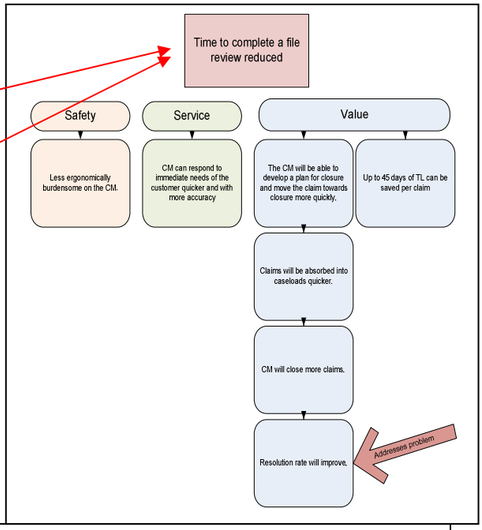


3. Target Setting:

The initial target is to reduce the amount of time needed to get claims from a disbanded caseload moving towards closure by 50% - from 180 days to 90 days by March 2012. The ideal goal would be to reduce the amount of time from 90 days to 1 day by September 2012 in order to more accurately and efficiently adjudicate the claim.

4. Root Cause Analysis:





5. Countermeasures: Countermeasure Evaluation Matrix

Please note each option was evaluated as a stand-alone countermeasure.

Points assigned: 3=Most effective; 2=Effective; 1=Least effective; 0=Not effective

	Value				Service				Safety	
	Cost to develop and implement	Time required to develop and implement	Decreases cost for the department	Decreases cost for the customer	Benefits to external customers	Increases quality of claims adjudication (actions to address brushfires vs. resolution)	Decreases time to complete and file review (takt time and lead time)	Decreases the number of ticks bumped by the CM during the adjudication of a claim	Reduces ergonomic burden to staff	Total Score
Option A: Develop and implement system changes to create an ORION based file review	1	2	3	3	3	3	3	3	3	24/27 **89%**
Option B: Develop a consistent method for using bookmarks and train CMs	3	2	2	2	3	2	2	2	2	20/27 **74%**
Option C: Develop and pilot (in Unit 9) a stand process for creating a file review in ORION. If successful, roll out the pilot when complete	3	2	1	1	2	2	1	1	1	14/27 **52%**
Option D: Review and update index categories for imaging and ask imaging staff to bookmark specific documents	1	1	0	0	1	1	2	0	1	7/27 **26%**
Option E: Change index rules to allow CMs to hide duplicate documents	2	2	2	0	0	0	2	0	2	6/27 **22%**
Option F: Develop a standard process for file reviews and have Claims Training teach incoming staff early and remind them of this standard towards the end of the training process	2	2	1	0	1	1	0	0	0	9/27 **33%**
Option G: Add bookmarking claims to CBLs and CM expectations	3	2	0	0	1	1	1	0	0	8/27 **30%**

Recommendation

Goal	Countermeasure	Rationale: Safety	Rationale: Service	Rationale: Value
• Increase ability of the CM to better identify issues and work claims more quickly towards resolution. • Increase the timeliness of response to customer inquiries and identification of potential issues	Work with ISTS to develop and implement system changes creating an automated ORION generated file review. By the system generating the file review screen, all standard elements will be consistently pulled from all claims.	Reduces ergonomic burden on staff.	Improves quality of CM decisions.	Reduces time needed to respond to customer inquiries.
	Develop and pilot standards for bookmarking significant documents. The automated ORION generated file review will document significant events and the standard approach to bookmarking will show if the report is available and where it is in the claim file.			
	Restructure the "Claims Details" screen in ORION to increase utilization of elements of that screen.			

6. Action Plan (Milestone Chart):

What	Who	When	Status
Work with Claims Operations Managers to identify stakeholder group for recommendations	Claims Operations Managers	Oct. 2011	Complete
Complete recommendations for ORION (file review and "Claims Details" screen) with sequencing and estimated costs.	M. Pogue and Stakeholder Group	Nov. 2011	In progress
Present final recommendations to ISTS for implementation	K. Peterson, M. Pogue, Stakeholder Group	Dec. 2011	
Develop a standard for bookmarking claims and implement pilot	Stakeholder Group	Dec. 2011	
Implement changes in ORION	ISTS	TBD 2012	