WGFOA Fall Conference

Wilderness Resort, Wisconsin Dells
September 20-21, 2018
Theme: Change Management

WGFOA
WISCONSIN GOVERNMENT FINANCE OFFICERS ASSOCIATION

Presenters

- Steve Corbeille – Finance Director/Treasurer
- Kim Lynch – Comptroller/Deputy Treasurer
- Yvonne DeGroot, Instructor – Fox Valley Technical College
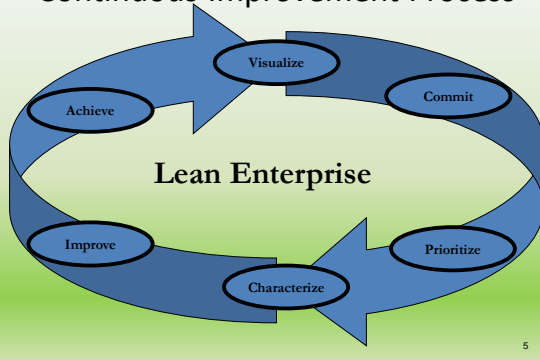- Cindy Wetzel, Instructor – Fox Valley Technical College

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What is LEAN?

- A time-tested set of rules and methodologies for:
  - Identifying and reducing waste and defects
  - Improving productivity and customer service
- Engages the people working in the process
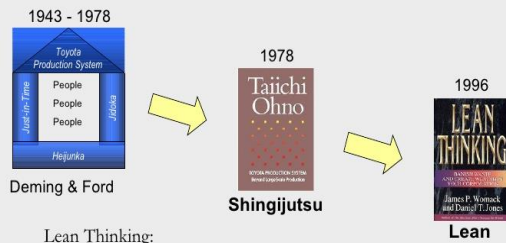- Goal is measureable, quantifiable improvements in business processes

3

What is LEAN

- It's about the process – not the employee;
- If you want different results, you need to perform different;
  - One definition of insanity; performing the same task over and over again and expecting different results.
  - Lean Overview (or, What is Lean?)

Continuous Improvement Process

Visualize

Commit

Achieve

Lean Enterprise

Improve

Prioritize

Characterize

5

History of Lean

1943 - 1978

Toyota Production System

Just-in-Time

People
People
People

Jidoka

Heijunka

Deming & Ford

1978

Taiichi Ohno

TOYOTA PRODUCTION SYSTEM
Beyond Large-Scale Production

Shingijutsu

1996

LEAN THINKING

James P. Womack and Daniel T. Jones

Lean

Lean Thinking:

A principle driven, tool based philosophy that focuses on eliminating waste so that all activities/ steps add value from the customers perspective.
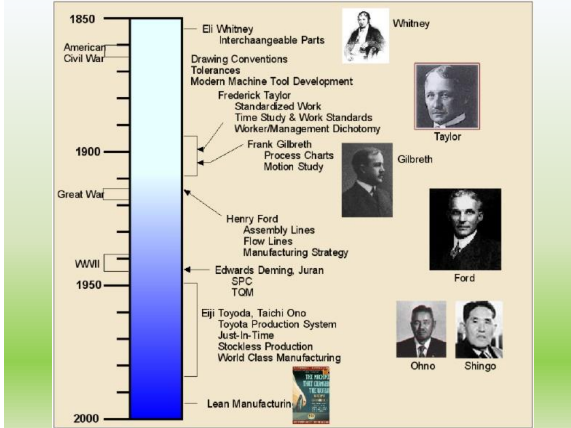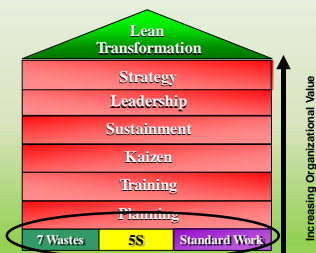
Why Lean, why now?

Public agencies are being asked to do more with smaller budgets and a shrinking workforce.

So how can we continue to provide quality service to our customers?

Lean can help.

Building a Successful Lean/CI Transformation

Federal Government Lean Activity

Over 20 federal agencies have used Lean to improve the speed & effectiveness of their processes

10

County, Local List

What Makes Lean Different?

Why Lean is different:
- ✓ Focuses on rapid, immediate, real-time change
- ✓ Delivers fast results to build momentum
- ✓ Emphasizes doing over planning
- ✓ Keeps all eyes on what matters thru metrics/visual systems
- ✓ Builds continuous improvement culture by empowering workforce to own the process and its effectiveness

12

Why focus on process?

- Nearly every tangible output, service or product is the result of a series of system processes
- Over 80 percent of process improvement opportunities are within the process itself
- Processes can be mapped, measured and managed to insure consistent, positive results

13
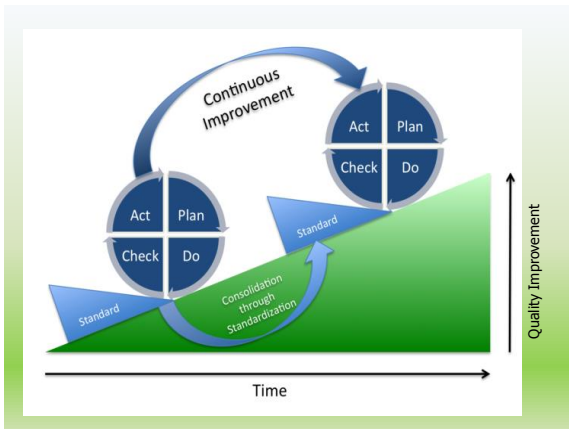
The Seven Wastes + 1

- Defects (poor quality)
- Transportation
- Waiting
- Overproduction
- Inventory
- Motion
- Extra processing
- Underutilized creativity

Defects

Any element of a product or service that does not meet or exceed a **key** customer requirement.

Defects also create:

- Re-work
- Re-inspection
- Employee frustration
- More cost

17

Transportation

The unnecessary movement of people, information or materials between processes.

How often do you wait?

Waiting accounts for 95% of the time that is required to produce a product or service.

Waiting

- Waiting for anything (people, paperwork, machines, or information) is waste.
- Examples could include:
  - Waiting for photocopies, faxes, or computers to respond
  - Waiting for customer files or reports from others
  - Waiting for unreturned phone calls or emails
  - Meetings that don't start on time

Overproduction

Producing products or services faster than your customers are using them requires:

- More movement
- More storage
- More capital tied up in inventory
- More resources to track inventory

Office examples of overproduction

- Need 54 copies, but make 60, just in case.
- Print 5000 brochures because the price per unit is cheaper, then inventory, store and finally recycle 2/3 of them.
- Print and distribute forms that frequently change.

Overproduction

- Definition: Transporting farther than necessary, or temporarily locating, restacking, or moving (including people, paper and information).
- Examples could include:
  - Paperwork moving from floor to floor
  - Mail distribution
  - Locating people that work together – the farthest apart

Inventory

- Definition: Too much of anything is a waste; anything unneeded is waste.
- Examples could include:
  - Extra office supplies
  - Extra copier paper
  - Extra reports
  - Multiple files (hard copy as well as digital)

Motion

Any people movement that does not add value to a product or service.

41

The Waste of Motion

- Definition: Unnecessary work movements are a form of waste. All motion or movement (you, paper, information...) ideally should add value to the product or service produced for the customer.
- Examples could include:
  - Confusing motion with work
  - Walking and searching are great indicators and a natural response to waiting waste

Extra Processing

Examples:
- Multiple inspections
- Multiple signatures
- Batching
- Different ways to produce the same product (no standard work)

32

Underutilized Creativity

- People who work in the process know the process best.
- Do they have the tools, training, and <u>permission</u> to improve it?

33

The Waste of
Lack of Participation and Creativity

- Failure to engage every worker in the improvement effort and solicit their ideas.
- Examples could include:
  - No implemented ideas for improvement on a daily, weekly, monthly basis
  - No team meetings to solve problems

Fundamentals of Lean:
5S

36

The 5 "Ss"

- Sort
- Set In Order
- Shine
- Standardize
- Sustain
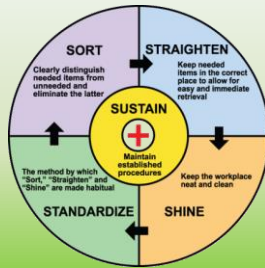
37

1S

Sort

"When in doubt, move it out."

38

1S   Example - Sort

Distinguish between necessary and unnecessary items and information

39

1S **S**ort – process steps

Identify where & what to sort

- Personal workspaces
- Common areas
- Supply cabinets
- Storage areas
- Garages
- Warehouses

1S Helpful hints

- Determine if the item is necessary
  - Usefulness
    - Does it function?
    - Do I need it for my job?
  - Frequency of use
  - Quantity needed
- Don't compromise
- Decorative and personal items

41

1S Electronic files - Sort

- Email
- Files on:
  - Hard drive
  - Personal drive
  - Shared Drive
- Archiving
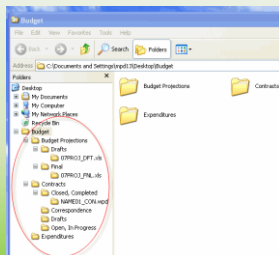
42

1S Shared Drives

- Develop a file structure to include projects, meeting minutes, commonly shared files, etc.
- Develop a consistent file naming scheme for folders.
- Assign responsibility to clean out on a monthly basis.

43

2S Set in order – Why?

- Immediately recognize items out of place, and an excessive or insufficient amount of items
- Eliminate time wasted locating items
- Improve customer service

44

2S "Set in order" rule of thumb

- Arrange and label items so that ANYONE can find them.
- YOU should be able to find ANYTHING in your office in 30 seconds or less.
- ANYONE should be able to find ANYTHING in YOUR office in 60 seconds or less.
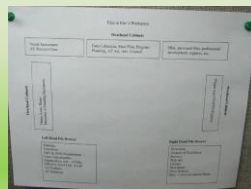
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2S How long would it take you to find what you're looking for here?

46

2S Versus HERE !!!

47

2S 5S desktop layout example

48

3S

Shine

"The best cleaning is to not need cleaning."

49

3S

Shine – What is it?

- Cleaning from top to bottom
- Daily maintenance
- Taking preventive measures for ongoing cleanliness
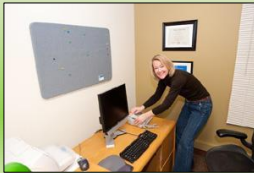
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3S

Shine – Why?

- Boost employee morale
- Improve health and safety of employees
- Develop sense of ownership in the office
- Identify and eliminate root causes of cleanliness issues

If a workspace is getting dirty faster than it can be cleaned, the root cause of the problem has not been identified.

51

3S Shine – process steps

Effective Execution
- Assign areas
- Develop standard work
- Set time limits
- Encourage coordination
- Ask an objective third party to conduct inspections

52

4S

Standardize

"See and recognize what needs to be done."
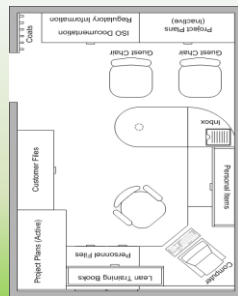
53

4S Standardize – What is it?

- Makes "Sort," "Set in order" and "Shine" habitual

54

4S Standardize – Why?

- Enhances organizational performance
- Eliminates the need to re-do first 3S's
- Consistency

55

5S Sustain – What is it?

- Effective, ongoing application of 5S in order to improve organizational performance
- Maintaining a commitment to 5S
- Sustaining improvement is the most difficult part

56

5S Sustain – Process steps

Keep it fun

- Friendly competition
- Teamwork
- Before and after photographs
- Positive reinforcement
- Individual recognition or rewards

57

Number Sorting Game

59

60

Before – lock/key counter – B&G shop

After – lock/key counter - B&G shop

Visual Management

A communication device that tells, at a glance, how work should be done.

1. Where items belong
2. How many items
3. Standard procedure
4. Work in progress

63

Color coding strategy

- Visually indicates an item's purpose
- Example: Similar files are color-coded and stored in the same location.

65

Poka yoke – error proofing

In order for my wife to remember to turn the oven off, she wears the rubber band whenever the oven is on as a constant reminder.

66
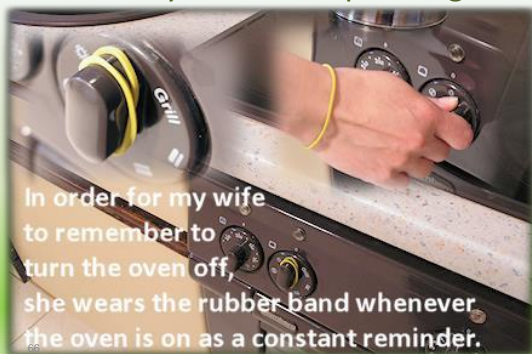
Error Proofing

Poka Yoke
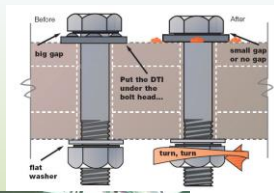
Results – Visual Controls

Standard Work
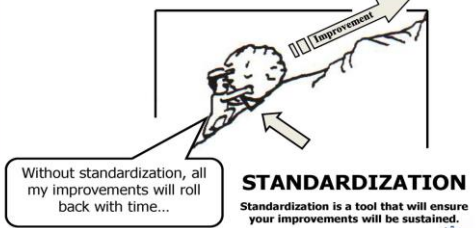
What comes to mind when you think of standard work?

Standard work is…

- One of the three foundation blocks of Lean
- The safest, highest quality, and most efficient way known to perform a particular task in a process
- Reduces variation, increases consistency
- Continually improved

73

Example of standard work

There is no silver bullet for standard work – it is different for every organization in every area of work.

The key to standard work is keeping it clear and simple, so staff can quickly and accurately complete their work. Below you will find a portion of one agency's standard work.

Why standard work?

- Focuses on helping the employee be successful in the process
- Reduces variation, increases consistency, ease of training
- Improvements will not be sustained without it

100

"Where there is no standard, there can be no Kaizen."

Taiichi Ohno
Vice-President,
Toyota Motor Company

78

What Is a Kaizen Event or Value Stream Mapping (VSM)?

- 3-5 day event with cross-functional team
- Strong leader commitment
- Experienced facilitator
- Train on Lean methods
- Map the current process
- Identifying improvement opportunities
- Mapping a new, improved process
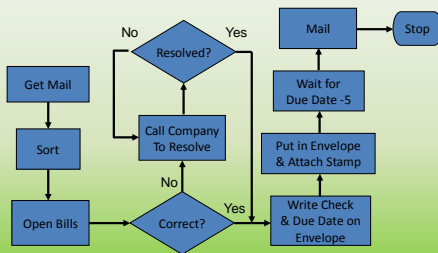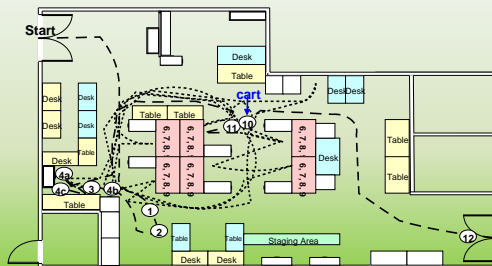- Rapid implementation of new process and measurement of results

79

Types of Process Maps

- Flow Charts – Good for showing decisions and loops
- Value Stream Maps – Good for showing how value is added (tend to be linear)
- Spaghetti Maps – Good for showing physical movement of people and material
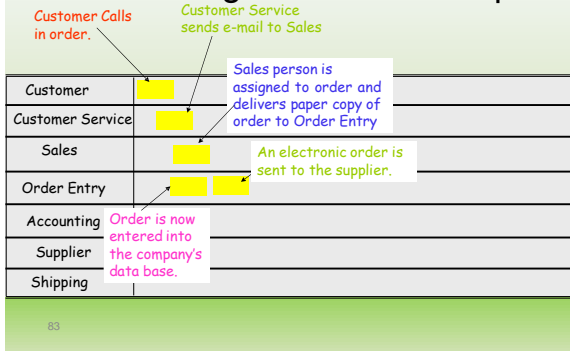- Swim Lane Map – Good combination of first two maps

Flow Chart

Spaghetti Map

Building a swim lane map

Customer Calls in order.

Customer Service sends e-mail to Sales

Sales person is assigned to order and delivers paper copy of order to Order Entry

An electronic order is sent to the supplier.

Order is now entered into the company's data base.

Customer	
Customer Service	
Sales	
Order Entry	
Accounting	
Supplier	
Shipping	

83

Mapping Tips

- Map the Activities in Process Sequence

- Follow the Flow from Beginning to End

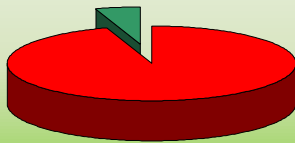- Capture the Process as It Currently Operates

Walk the process

From the **beginning**   To the **end**

Building a VSM

- Analyze and define each process step as value-added, cost-added or waste

Typical Office
Non-Value Added vs. Value Added

Value Added 5%

Non-Value Added 95%

Non-Value Added = **Waste + Cost Added**

SNOW PLOW VSM RESULTS

Winter seasons compared

	Ave. employees involved in plowing ops	Ave. hours for plowing and pickup of a 5" storm	Miles plowed	Ave. man-hours/storm	Ave. man-hours per mile	Actual time savings
2010/2011 winter	46	10.63	190	488.98	2.57	
						12.29%
2011/12 winter	23.5	18.25	190	428.875	2.26	
						8.56%
2012/13 winter	25.3	15.5	190	392.15	2.06	
						10.33%
2013/14 winter	24.25	14.5	190	351.625	1.85	

Plowing VSM action items

	Estimated savings	Actual savings 2011/12 to 2012/13
Cul-De-Sac procedure	2.50%	5%
Doubling up plows	5%	3.56%

Additional items

		savings
Closer snow dumps		7.65%
Review change plow routes		2.68%

Color Key
before staff cuts
after staff cuts
after 2013 vsm
after 2014 continuous improvements

Report Out

- Introduce Team and Chosen Process
- Cover Expectations
- Review "IS" Process Condition
- Explain Goals and Performance Metrics
- Walk Through Brainstorming, Circle of Concern/Influence, and Johari's Window/Impact Quadrant

Report Out continued

- Cover "SHOULD BE" Process and Results of the VSM and Process Redesign
- Go Over the Implementation Plan
- What Did Each of Us Learn

Rapid Improvement Events

- 2 – 4 Hour Event which addresses
  - Identify the goal to be accomplished
  - Identify how the change will be measured
  - Select changes to implement which will result in a true improvement
  - Test the change via the "Plan, Do, Act Cycle"

Rapid Improvement Events

- Define the Problem
- Form a Team
- Understand the Problem
- Identify the Root Cause
- Select and Plan Solutions
- Implement the Plan
- Access the Results
- Implement the Solution

Rapid Improvement Events

Results –
Rapid Improvement Leaf Pick Up

My "Idea" Form

Share your ideas!

- Share your improvement ideas or projects and you will be registered to win a copy of "Everything I Know About Lean I Learned in First Grade"
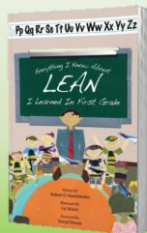
Questions?

- Next Up:
  - –Finance & Leadership
  - –Supporting Role in Metrics and Measures of Success