

LeadingAge Maine & New Hampshire 2014 Annual Conference

Lessons Learned from the Manufacturing Sector – Implementing Lean in Aging Services



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The Essence of Lean...

The continual pursuit of
delivering value for
customers in the
least-waste way

The American Word For
“The Toyota Way”

Value-adding vs. Necessary Processes

**Value-adding
(VA)**
Improve

**Non-value adding
(NVA)**

Necessary
Minimize

Unnecessary
Eliminate

Wastes

Two rules of Value:

- 1) It can only be determined by the end customer.*
- 2) It only occurs at the “point of impact”.*

Typical Airplane Trip

- Drive 25 miles to airport
- Park in ramp
- Take shuttle to terminal
- Walk .25 miles to check-in
- Self check-in
- Wait for agent to put tag on bag
- Wait in security line
- Walk to gate
- Wait for boarding
- Board plane
- Wedge into seat
- Wait to leave
- Taxi
- Wait in line to take off
- Fly
- Taxi
- Wait for ground crew
- Walk to baggage
- Etc...

Seven Wastes

- Waste of correction
- Waste of waiting
- Waste of motion
- Waste of transportation
- Waste of over-processing
- Waste of over-production
- Waste of inventory
- All leading to ... the waste of a person

Waste of Correction

- Waste that occurs when a product does not conform to proper specifications. The result could involve product rework or scrap.
- Primary causes:
 - Lack of error proofing
 - Poor instructions and training
 - Lack of communication between processes
 - Lack of standard work
 - Inadequate supplier quality
 - Need for adjustments
 - Poor customer integration

Waste of Inventory

- Waste of resources when they are consumed in advance of when they are required by the next customer in the process.
- Primary causes:
 - Building to a forecast
 - Traditional productivity measurements
 - Quality problems
 - Batch production
 - Long setup times
 - Lack of continuous flow
 - Poor Customer Integration

Waste of Transportation

- Waste caused by unnecessary movement of material or product.
- Primary causes:
 - Inefficient facility layout
 - Inefficient facility location
 - Inefficient use of technology

Waste of Over-Processing

- Waste of unnecessary processes and operations.
- Primary causes:
 - Not identifying customer values
 - Not asking 5-why's for a process step
 - Variation within a process
 - One-size-fits-all

Waste of Waiting

- Waste caused by not having all the material, supplies or information available exactly when needed for the worker to do their value-added job without interruption.
- Primary causes:
 - Operations not linked
 - Material and supplies do not arrive in the quantity needed
 - Unclear roles and accountabilities
 - Quality defects
 - Lack of client integration into the process
 - Insufficient tools (e.g. access to technology)

Waste of Motion

- Waste caused by non-value added movement of workers and production machines.
- Primary causes:
 - Inefficient workplace layout
 - Inefficient tools
 - Lack of standard work—consistency
 - Inconsistent information storage

Waste of Person

- Waste that is caused when a person performs any of the other seven wastes, thereby not being able to apply their knowledge and skills full-time to the task of adding-value.
- Primary causes:
 - Lack of employee and management involvement

Continuous Improvement—Waste Reduction

Typical
Provider



Traditional
Operational
Improvement



Lean



VA = Value Added

NVA = Non Value Added

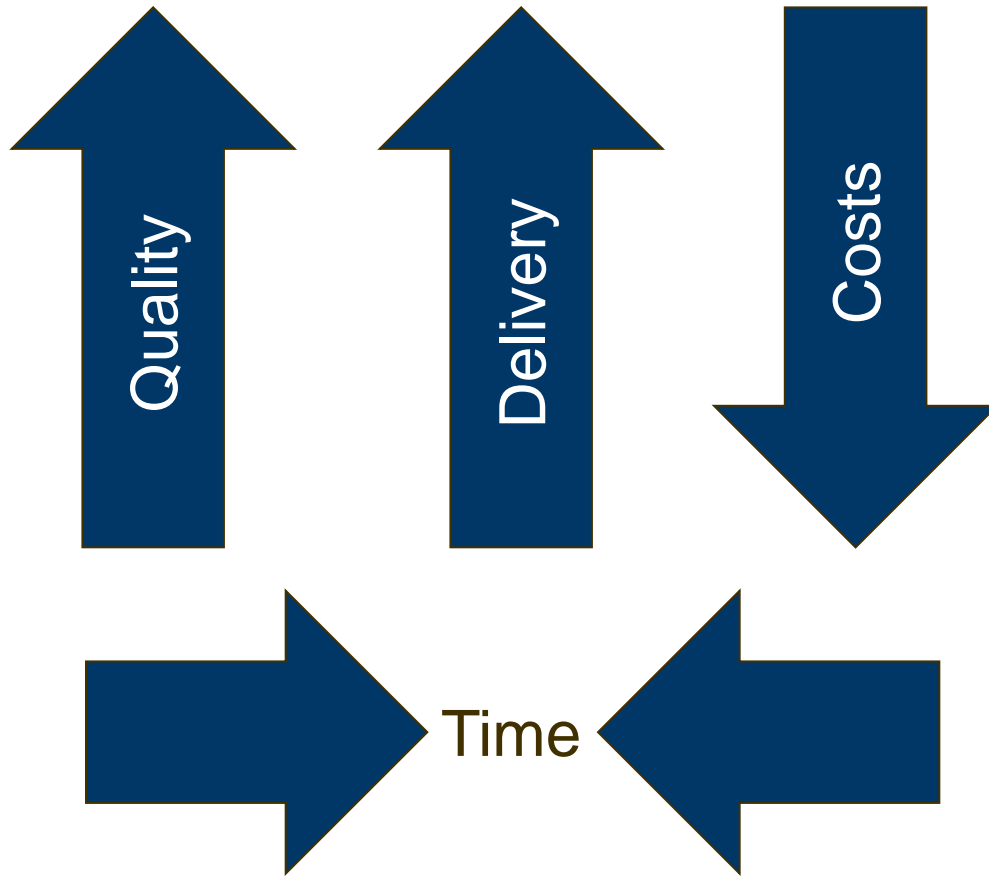
The 14 Principles of the Toyota Way (Lean)

1. Long-term philosophy (mission and vision)
2. Continuous flow
3. Pull systems
4. Level workload
5. Stop to fix problems
6. Standardized tasks
7. Visual control
8. Reliable and tested technologies
9. Leadership development
10. Team development
11. Respect for partners and suppliers
12. Go and see
13. Consensus decisions, rapid implementation
14. Learning organization and continuous improvement

Principle 2

Continuous Flow

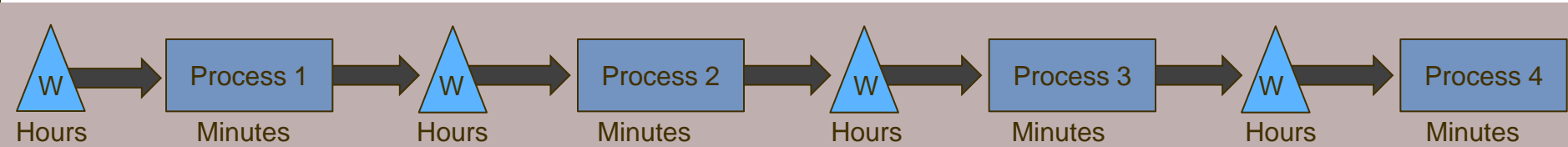
Cost & Quality are NOT a trade-off



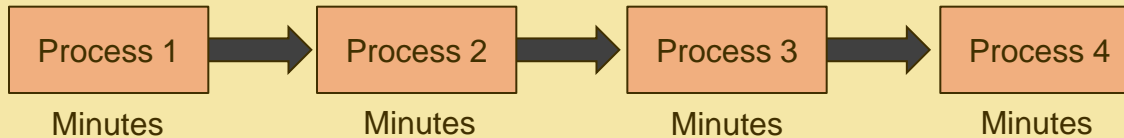
Time is compressed through the elimination of waste—NOT by taking shortcuts.

Principle 2: Continuous Flow

Traditional



Continuous Flow



Principle 6

Standardized Tasks

Principle 6: Standardized Tasks

One best way, done by everybody,

until ...

a better way is found.

Standardization is Difficult

- Standardization creates the foundation for improvement
- Standardization is an enabler of change ... not a barrier to change
- One of the most difficult cultural challenges

Principle 7

**Visual
Control**

Principle 7: Visual Control

- Real-time
- On-the floor
- Make abnormal ugly

Kaizen

A tool for empowerment and change.

What is Kaizen?

- Continuous incremental improvement
- Literal translation: “Change” & “For The Better”
- Kaizen structure
 - Focused
 - Cross-functional
 - Outcome-oriented
 - Fast-paced
 - Results, not recommendations

Kaizen Flow

Monday

- Training
- Map Current State
- Identify VA/NVA

Tuesday

- Brainstorm new processes
- Filter to 2 options

Wednesday

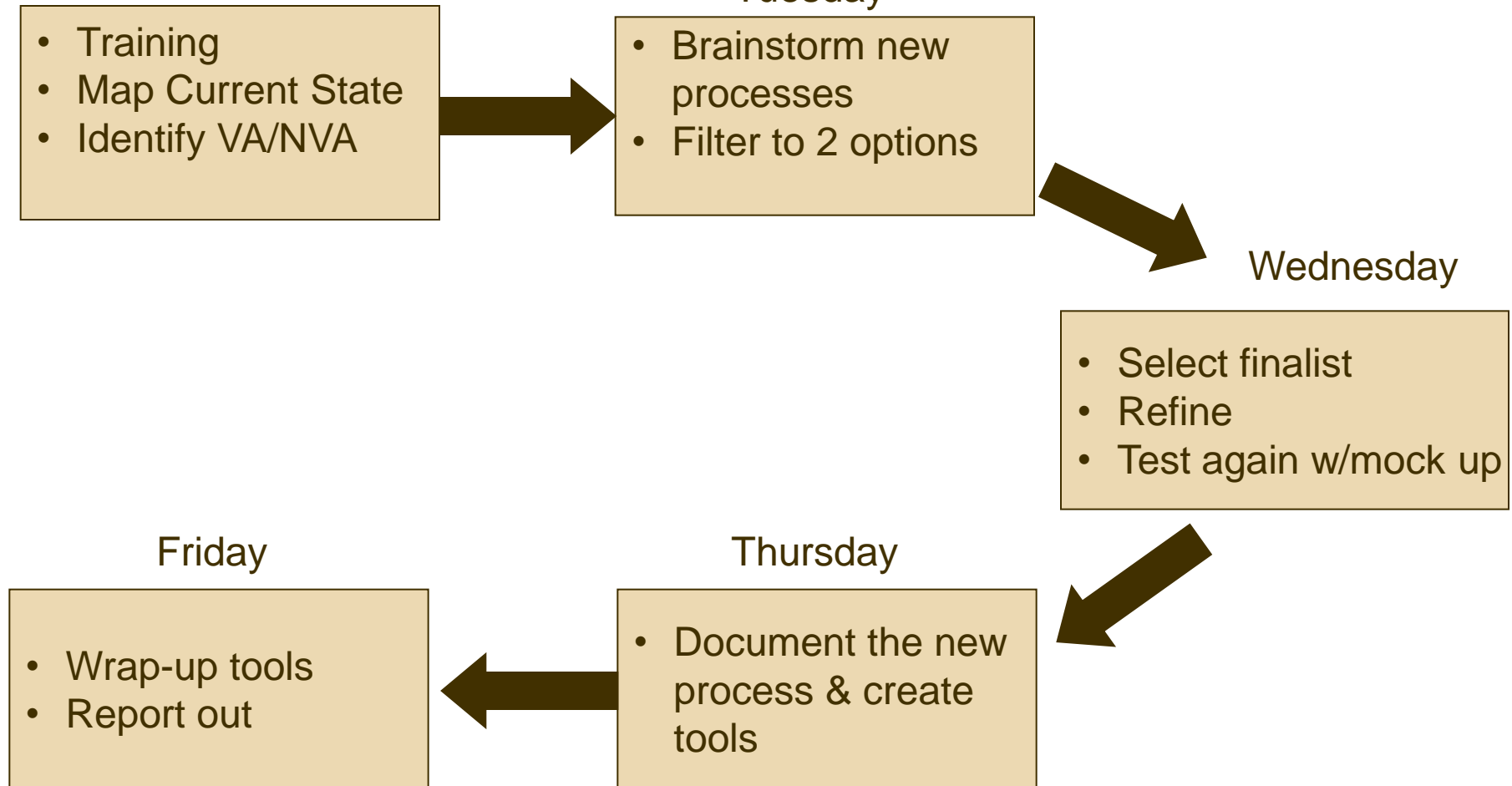
- Select finalist
- Refine
- Test again w/mock up

Friday

- Wrap-up tools
- Report out

Thursday

- Document the new process & create tools



CNA Workflow – Develop ideas for improvement

- Analyzed
- Brainstormed
- Generated 75 ideas for Improvement.

CNA Workflow

Examples of the biggest impact opportunities:

Searching for supplies

Waiting for Hoyer Lifts

Not having gloves inside resident rooms

Not having a dedicated shower aid

Too much motion finding towels and linens

Summary Results of One Kaizen Event

“Liberation” of 18% of the CNA’s time by reducing the time spent walking and searching for supplies.

Leading a Lean Transformation

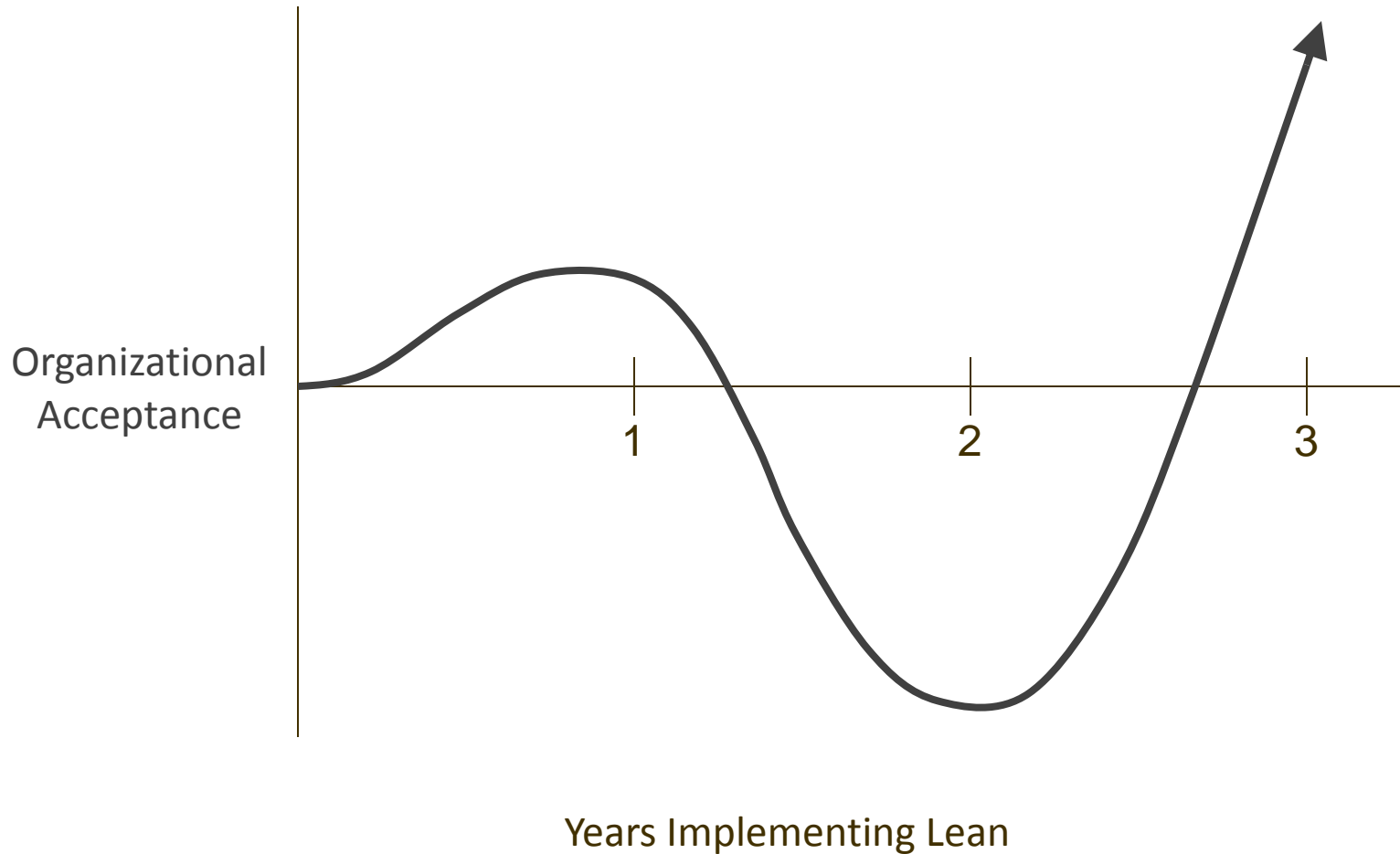
Key Considerations Getting Started

- What is the strategic imperative? Why are we doing this?
- What are we going to do with the “liberated capacity”?
- How are we going to handle C.A.V.E. (citizens against virtually everything) people?
- What are the cultural challenges we’ll face and what are we going to do about it?

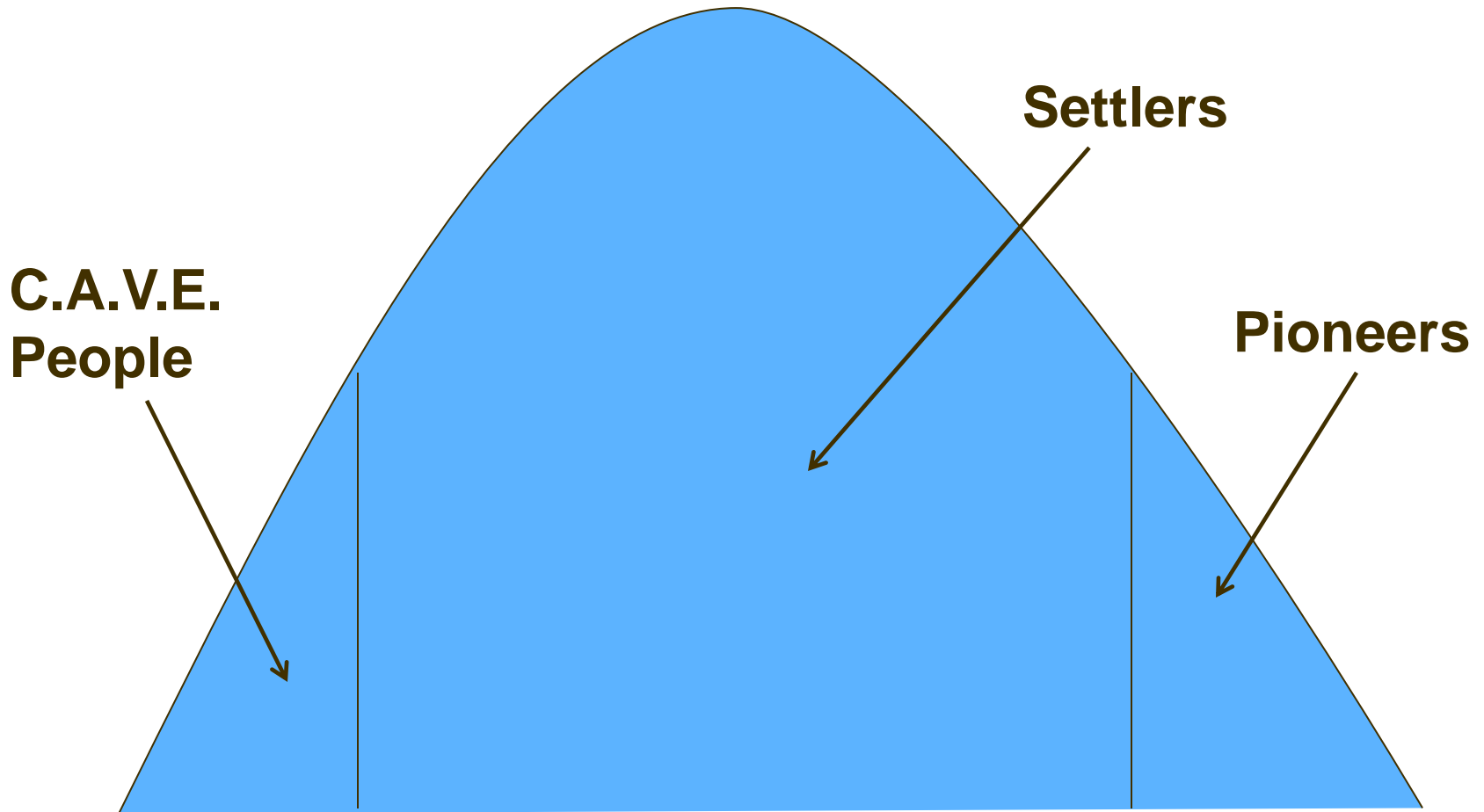
It's about the people...

- 20% tools (processes, systems)
- 80% people (behaviors, skills, paradigms)

The Road is Challenging, but Rewarding



Employee Reaction to Lean Change



Our Advice for Leading the Change

- Lean is not a spectator sport
- “Buy in” is a result, not a prerequisite
- Leaders must develop deep knowledge
- Plan for no plan “B”
- Steer a rubber raft not a racing scull
- You can change the people, or you can change the people, you’ll need to do both



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