

# AFC Summer Conference 2013

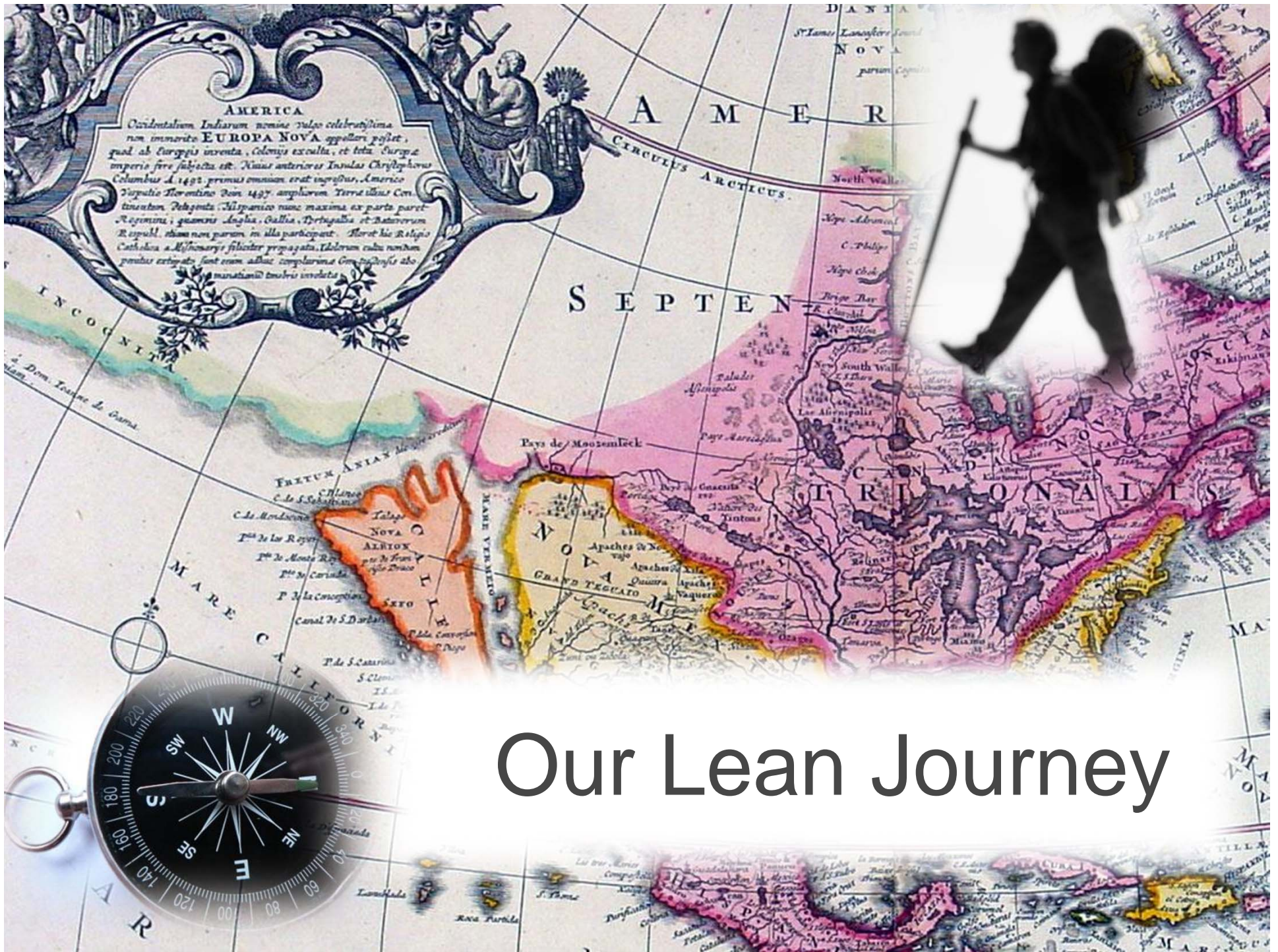
June 12-14, 2013 | San Diego, California



## Haley & Aldrich: Our Lean Journey

**HALEY &  
ALDRICH**





# Our Lean Journey

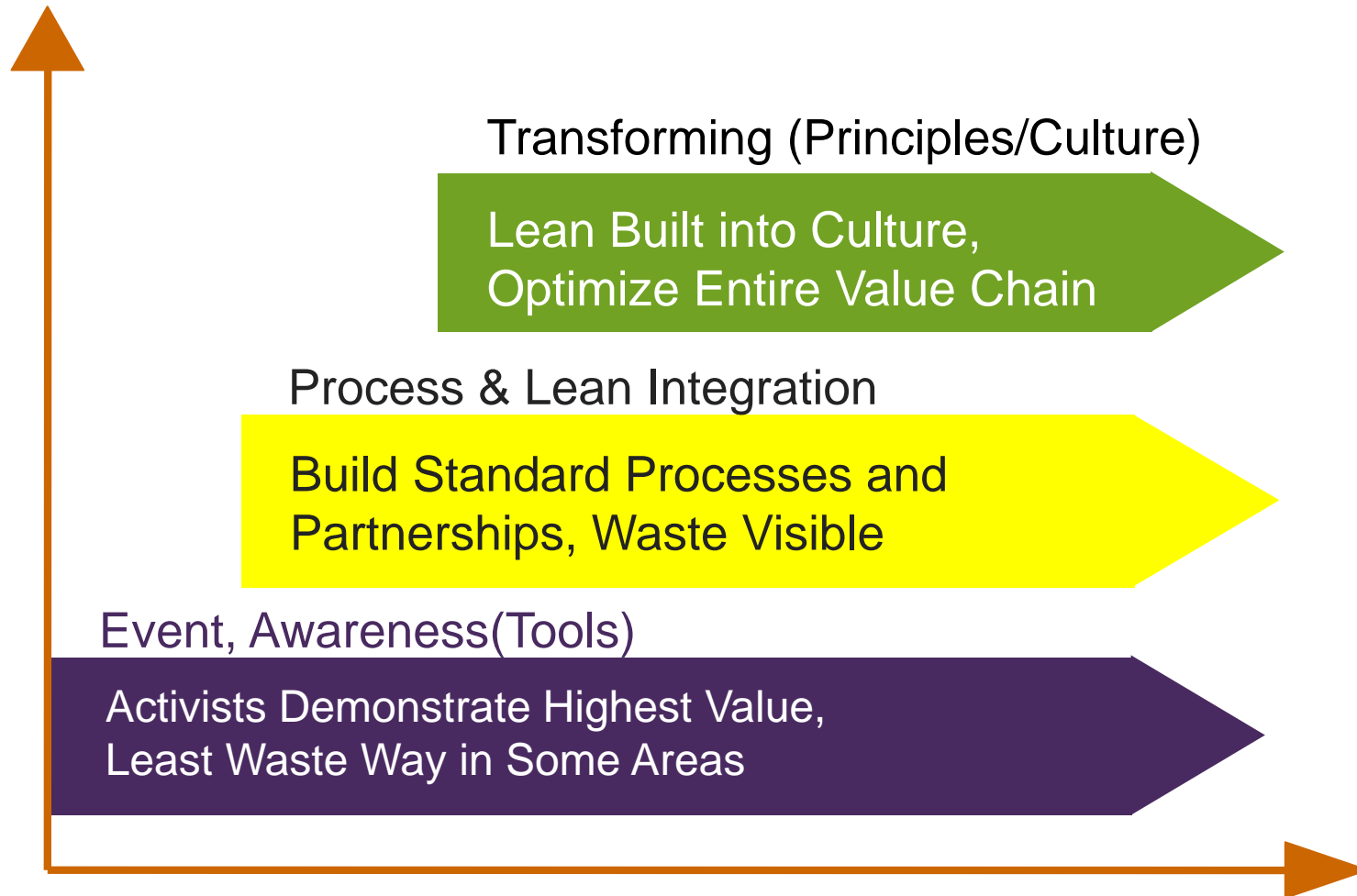


**AMERICA**  
Occidentalium Indiarum nomine vulgo celebratissima  
non immerito **EUROPA NOVA** appellari possit,  
quod ab Europaeis inventa, Colonis excolta, et tota Europae  
imperio sine subiecta est. Nunc anterior Insulae Christophorus  
Columbus A. 1492. primus omnium erat ingressus, Americo  
Vesputio Florentino. Deum 1497. ampliorum Terrarum illius Cen-  
tinetur. Delimita Hispanico rone maxima ex parte parit  
Regimini, quatenus Anglia, Gallia, Portugalia et Batavorum  
Respubl. etiam non parum in illa participant. Florat hic Religio  
Catholica a Missionarij filiciter propagata. Uleorum cultu nondum  
peccatis extirgato: sunt etiam ab hac imperiorum Graecorumque abo-  
litione mansueti tuleri inuoluta

**Our Vision**  
*Be the company most  
sought after to integrate  
technology and human  
potential to tackle tough  
issues facing the world*

**Why Lean?**

# Aspects of Our Lean Journey



# Lean Phases



## Event – Getting Started

- Try something new to improve specific activities
- External Lean help
- Begin learning

## Results

- Pockets of improvement
- Some costs avoided
- Some customers See Value
- Skeptics get a chance to watch

# Phase 1 – Event Driven Improvement

## Old “Process” for Allocating Work



# times used/year  
4,800

# processes w/std  
work  
0

# roles assigning work  
6

Approximate cost  
\$4,700,000/yr



# Lean Phases



## Process

- Core processes improve value
- Visual management
- Standard Work, capable systems
- Strategy deployed & aligned with performance check & adjusted
- Organize around strategy & process
- Staff Learning

## Results

- Staff satisfaction rises – work effort reduced
- Processes highly predictable
- Cost, Quality, Speed ALL improve
- Working with suppliers



# Process Example

## Bridge Replacement Design & Construction



# Bridge Replacement Design & Construction

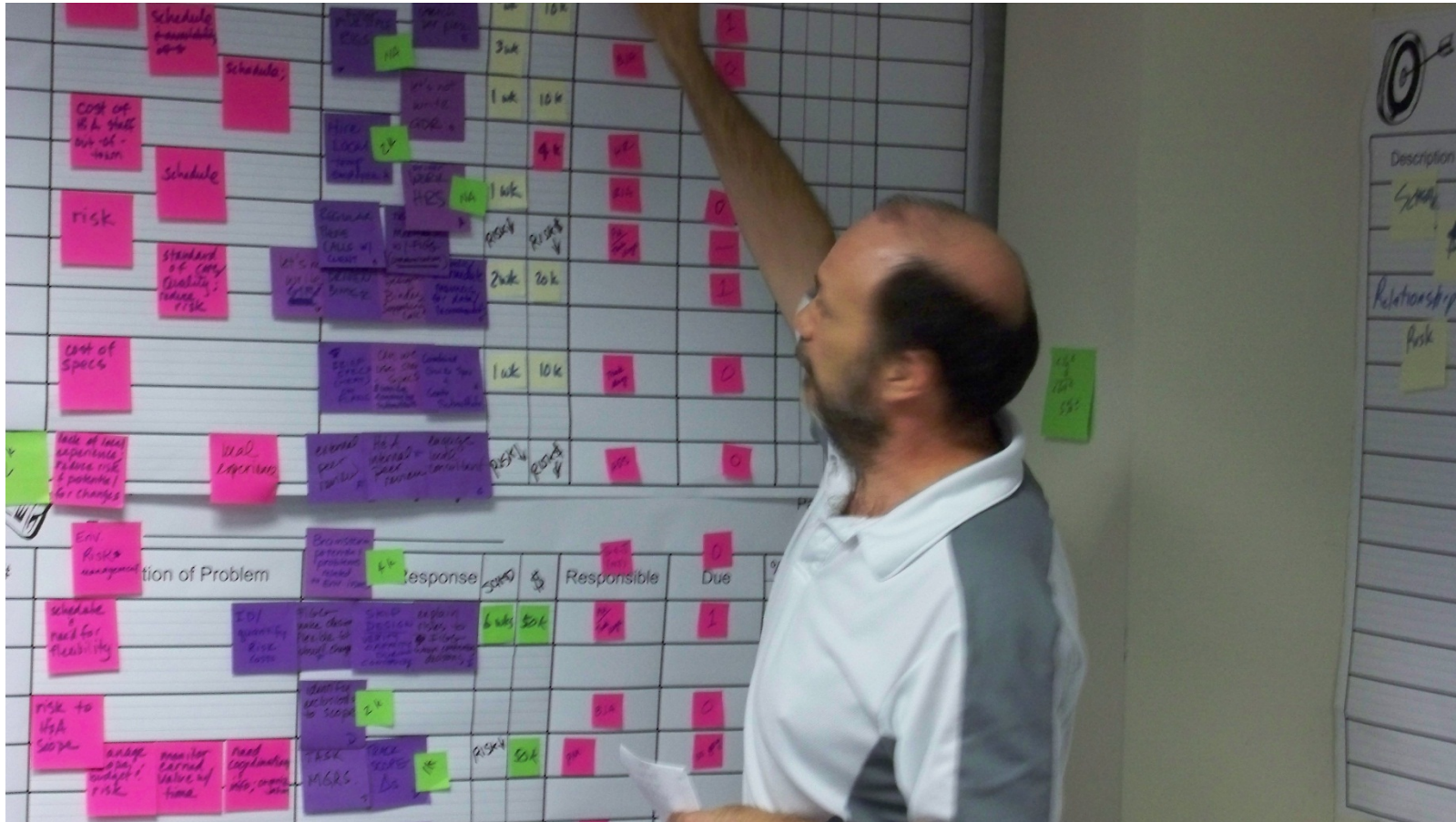
## *Target Value Design*

Constraints: Identified by Client (Private Organization Constructing and Operating Bridge):

- Time – emergency replacement, toll bridge revenue, traffic delays to public
- Costs – economic feasibility

Objective: Bridge needed to be designed and constructed in 18 months. Reduce time for engineering/consulting services from typical 15 to 30 months to 6 months. Same level of quality.

# Challenging the Way We Work



# Outcomes

## Customer Value:

- Time reduced 60% to meet target
- Cost reduced ~ 20% allow changes
- Quality - maintained

## Learning:

- Customer value
- Individual roles and responsibilities and contribution to achieving outcome
- Seeing waste, opportunity for improvement/added value

## Process Impact:

- Adjusted process for all subsequent projects – became a way of doing business
- Improved competitiveness



# Lean Phases



## Culture

- Customer partnerships
- Leveraging networks
- Alignment is “natural”
- Self-sustaining improvements and learning - way of life
- Laggards are swept along

## Results

- World-class performance
- Strongly differentiated, sought by clients and prospective staff

# Focusing on Culture

## Our Learn Journey Pathway



# How We Are Applying Lean Today

1. We apply it to ourselves
2. We apply it to our projects (engineering and environmental services)
3. We apply it with our clients through Lean consulting

# Lean Results: at Haley & Aldrich

- Reduced the cost of work load allocation by \$2M/yr
- Reorganized our overall company structure – much flatter
- Streamlined the following functions:
  - IT
  - Marketing
  - Human Potential
  - Construction Services
  - Database Management
  - Engineering Design Services





# Lean Results: For Our Clients

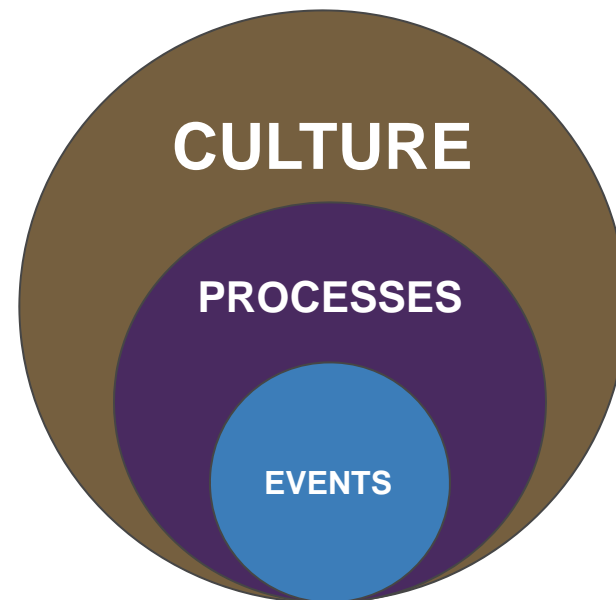
- 25-50% time reduction in environmental sampling processes
- 60% time reduction for bridge foundation design
- 44% of facility maintenance staff time identified to redirect from corrective maintenance to preventive
- Sustainability and ISO efforts connected & streamlined
- 40% reduction in purchased paper
- Sustainability curriculum changes created for 60 majors
- Dramatic increase in Climate Action Plan improvements
- 30-80% reduction in report costs, quality improved 15%
- Developed performance-based remediation systems for 2.4 billion portfolio

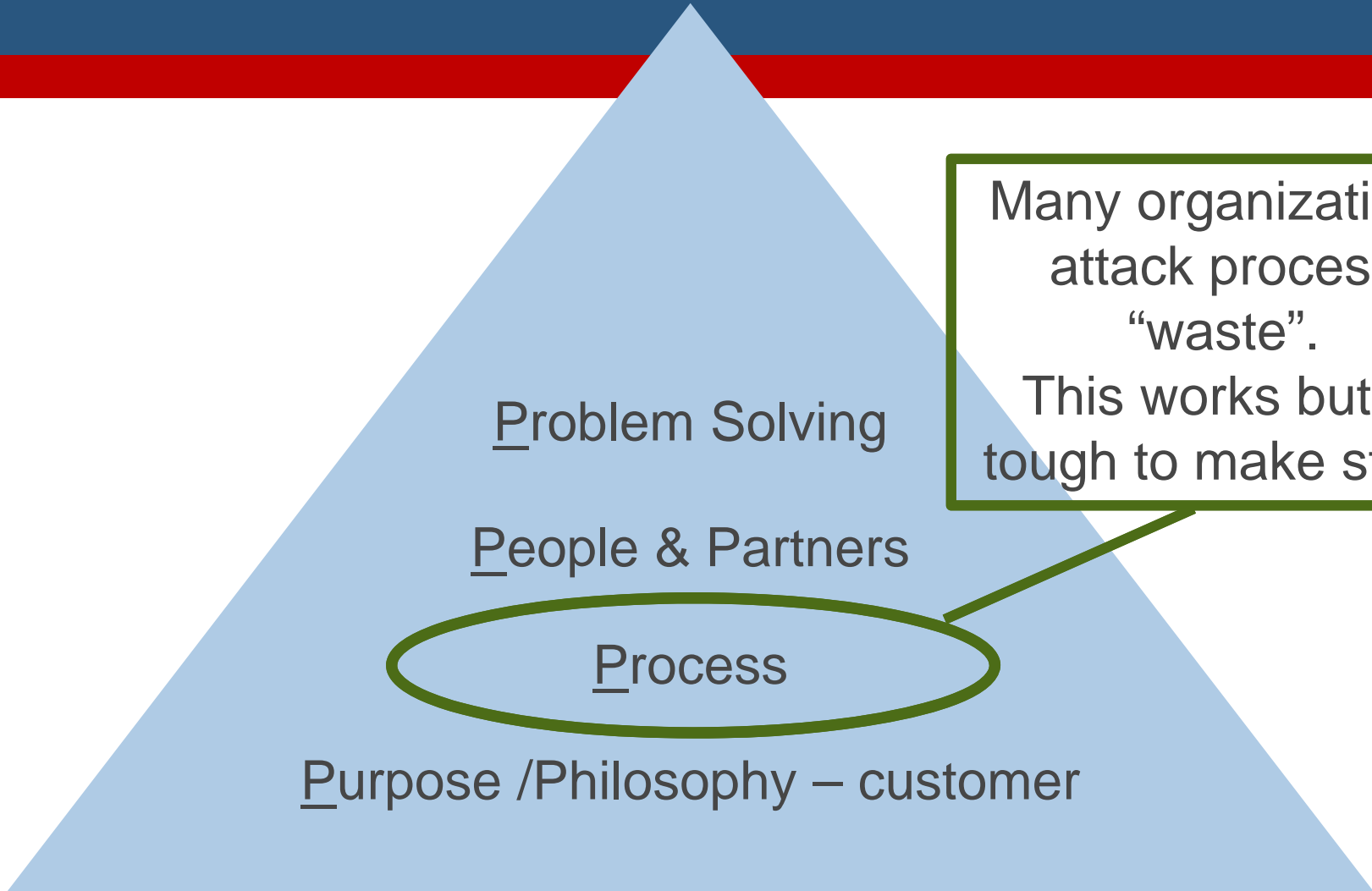
# Why Some Lean Efforts Fail



Being seduced by the effectiveness of tools and focusing on quick hits.

Not applying principles & considering how people think and act, how they work together and what they believe and value – Culture





Problem Solving

People & Partners

Process

Philosophy – long term, customer

Understand emotional intelligence; respect differences

Improve self awareness

Connect lean tools to what people need

# 10 Lessons From Our Journey

- 10 Starting fast with biggest problems can slow you down
- 9 Use dissatisfaction – give people access to tools and approaches to tackle
- 8 Strengthen culture (instead of trying to radically change it)
- 7 Measure results, make success & problems visible
- 6 Check & Adjust (of PDCA) makes a big difference – esp. for Lean plans



# 10 Lessons From Our Journey

- 5 5 bowls of rice
- 4 Use tools but focus on 4P principles to guide your efforts
- 3 Encourage learning and humility – they go well together
- 2 Respect people, develop staff skills and ask them to find better ways
- 1 Really talk to your customers – even if someone else needs to do it for you



# Need help getting started? We can help.

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# Additional Learning Resources

In addition, we recommend the following publications and organizations:

- [The Toyota Way](#) by Jeffrey Liker (McGraw-Hill, 2003)
- [Lean Thinking: Banish Waste and Create Wealth in Your Corporation](#) by James Womack and Daniel Jones (McGraw-Hill, 2003)
- [Lean for Dummies](#) by Natalie Sayer and Bruce Williams (For Dummies, 2007)
- [Lean Higher Education: Increasing the Value and Performance of University Processes](#) by William K. Balzer ( Productivity Press, 2010)
- Lean Construction Institute (LCI) <http://www.leanconstruction.org/>
- Lean Enterprise Institute (LEI) <http://www.lean.org/>

If you'd like to learn more about applying Lean principles and tools, including kaizen, value stream mapping and standard work to generate better results for your organization contact [lean@haleyaldrich.com](mailto:lean@haleyaldrich.com)