

# Merging Lean and Six Sigma Programs to Realize Enterprise Excellence

LAI Annual Conference, Baltimore, Maryland Dr. George Roth, Chair Massachusetts Institute of Technology April 1, 2009



# Merging Lean & Six Sigma Programs Agenda

# These materials spans two breakout sessions:

#### 1:30 to 3:15: Presentations

- Overview and framing (5 min)
- Company program updates (10 min ea.)
  - History time line of the LSS program, corporate program design (methods, staff, training, certification, resources, assessment), and linkage(s) to corporate strategy
  - Deployment illustration (mini case that illustrates program in its results)

3:45 to 5:30: Q & A Panel

8:00		
8:30		
9:00		
9:30		General Session I
10:00		with Keynote
10:30		Speakers
11:00		
11:30		
12:00		
12:30		Lunch
1:00		
1:30		
2:00		Breakout Session I (3-4 Tracks)
2:30		
3:00		
3:30		Break
4:00		Breakout
4:30		Session II
5:00		(3-4 Tracks)



## LAI Research Agenda: Groups Address Grand Questions

How can I understand the way my organization currently operates within its larger context?

How can I
define and evaluate the
future possibilities
for a more efficient and
effective enterprise?

What are the most
effective strategies
and tactics to achieve
these future possibilities
for my er terprise?

How can I best

manage the
enterprise
change plocess?

#### **EA-ET**

Enterprise Architecting
- Enterprise
Transformation

#### **FOCUS of RESEARCH**

- Enterprise Value Analysis
- Enterprise Architecting
- IT as Enterprise Enabler
- Enterprise Cost and Metrics
- · Enterprise Modeling

#### LEPD

Lean Enterprise Product Development

#### **FOCUS of RESEARCH**

- Lean Product Development
- · Lean Systems Engineering
- Lean Software

#### **ESE**

**Enterprise Systems Engineering** 

#### **FOCUS of RESEARCH**

- · ESE Approaches
- · SE Effectiveness Indicators
- Studies of ESE Practices (with MITRE)

#### **ECM**

Enterprise Change Management

#### **FOCUS of RESEARCH**

- Change Management
- Enterprise Change Philosophy
- · Studies of Successful Change
- Distributed Leadership



Lean Enterprise Change



## What does it take?

capabilities in each of the following areas

## 1. Rethinking organizational boundaries

Long-term system view that includes relationships across units and with suppliers and customers as a common value stream

### 2. Installing sets of innovations

Complementarities of changes beyond process improvement

## 3. Pulling and pushing change

Based on deeper cultural assumptions that enable a virtuous learning process within a "community of scientists"

## 4. Seeking growth opportunities

The positive vision for continual renewal

### 5. Distributing leadership

Interdependent roles in a system of leadership

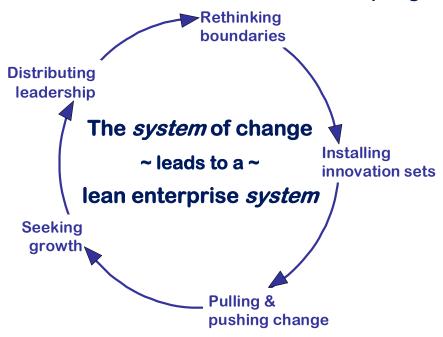
#### Calling these the "five capabilities for enterprise change"



# **Capabilities for Enterprise Lean Change**

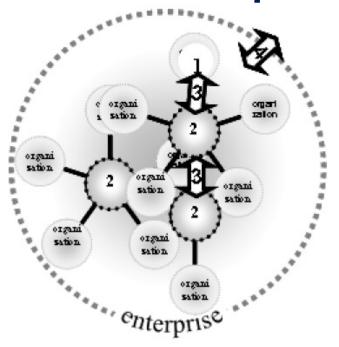
### Capabilities...

- are resources, talents, and abilities of an organization and its people
- that have the potential for development and use, and in their use,
- create expected outcomes while further developing themselves





# **Examining Enterprise Improvement & Change**



Source: "Lean Enterprise Change at Warner Robins ALC" Case Study, June 1, 2006

Figure 3 Levels of Analysis for Lean Multi-enterprise Change

#### Multi-enterprise change requires attention to four levels:

- 1) efforts and results in the local organization,
- 2) integrity and coherence of local organization efforts with enterprise changes,
- 3) alignment of local to enterprise efforts, and
- 4) accommodation of external factors found in the broader environment.



### 1:30 to 3:15: Presentations

BAE SYSTEMS

**Nicole Marin** 



**Jan Martinson** 



**Gerald Boisvert** 



**Mary Anne Jones** 



**Ida Gall** 



**Mark Edmondson** 



**Geoff Bentley** 



# 3:45 to 5:30: Q & A with panel Merging Lean and Six Sigma Programs

#### **Q & A process:**

- Start with submitted questions
- Open to audience
- Closing comments from panel (starting @ 5:15)

