AME/APQC Benchmarking CoP Virtual Networking Event October 23, 2012

The Boeing Lean + Overview

Dayde McLaughlin, Director - Lean+ Enterprise Initiative The Boeing Company

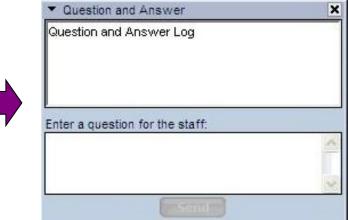


Housekeeping

All lines are muted.

You can submit questions/comments at any time. We will address all questions during the Q&A session at the end of today's presentation.





- Links to the recording and slides will be made available to all attendees via e-mail.
- Follow-up survey to provide more feedback.



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Session Agenda

10:00 a.m. Welcome/Housekeeping

10:05 CoP Business

10:10 Benchmarking Presentation

10:45 Open Q&A

11:00 Adjourn



2012 Benchmarking CoP Calendar

Month	Session	Presenter
February	Trends in Reinvesting in US Manufacturing 2010 (replay)	Harry Moser
March	Latest Best Practices in Supplier Category Management	KPMG/APQC
April	Sustainable Process Improvements	Mick Wilz
April	Role of KM in Growing US Manufacturing (Face-to-Face)	Various
May	Daman Products Company, Inc.'s Continuous Improvement Journey	Larry Davis
June	Report out from April face-to-face session on Growing US Manufacturing	CoP Steering Committee
July	The Latest Trends in Reinvesting in US Manufacturing	Harry Moser
September	The Boeing Min/Max Story	Brian D. Laughlin
October	The Boeing Company Lean + Overview	Dayde McLaughlin
October	Using Knowledge Management Strategies to Address Skills Gaps Today and in the Future (Face-to-Face)	Various
November	Cross-Industry Collaboration (Lehigh Valley Health Network)	Kathleen Sharp
December	TBD	TBD

Send your topic or presenter recommendations via the Q&A tab or email at rwebb@apqc.org.



AME Events (www.ame.org)

- 11/02 Calgary, Alberta
 - Lean Office Workshop
- > 11/06 11/08 Temecula, California
 - TWI-Job Instructions, Job Relations, Job Methods
- 11/06 11/07 Greensburg, Indiana
 - Toyota Kata at Delta Faucet
- > 11/07 Milwaukee, Wisconsin
 - Lean Daily Management (LDM)
- 11/08 Johnston, South Carolina
 - Milliken Lean Excellence Benchmarking Tour
- 11/13 11/15 Georgetown, Kentucky
 - DNA of Toyota's Manufacturing Flow
- > 11/13 Columbus, Ohio
 - Cause Map Workshop
- > 11/13 St. Charles, Illinois
 - Accounts Payable (AP) Process Kaizen Workshop
- **11/16**
 - Engaging Executives in Lean Management
- > 11/16 Des Plaines, Illinois
 - Leaning Out the Quality Management System Documentation



APQC Activities

http://www.apqc.org/events

- Webinars
 - November 7
 - APQC Member Orientation
 - November 14
 - APQC Member Orientation (Professional Services)
 - APQC Finance Community of Practice
 - November 15
 - APQC Knowledge Management Community of Practice
- Events
 - APQC's 2012 Process Conference and Training (more next)
 - Building Business Capabilities Conference (APQC Keynote)
- Open Benchmarking Activities
 - Best Practice Project Management Offices
 - Enhancing Idea Generation Through Collaboration
 - http://www.apqc.org/best-practice-studies



Benchmarking Presentation The Boeing Lean+ Overview

Dayde McLaughlin, Director - Lean+ Enterprise Initiative The Boeing Company

All lines are muted. Please send your questions via chat to the <u>Organizer</u>. We'll cover them at the end of this session.



We WILL send out a link to the recording of the event in the coming days.



Lean+ Overview

Dayde McLaughlin Director, Lean+ Enterprise Initiative The Boeing Company

23 October 2012





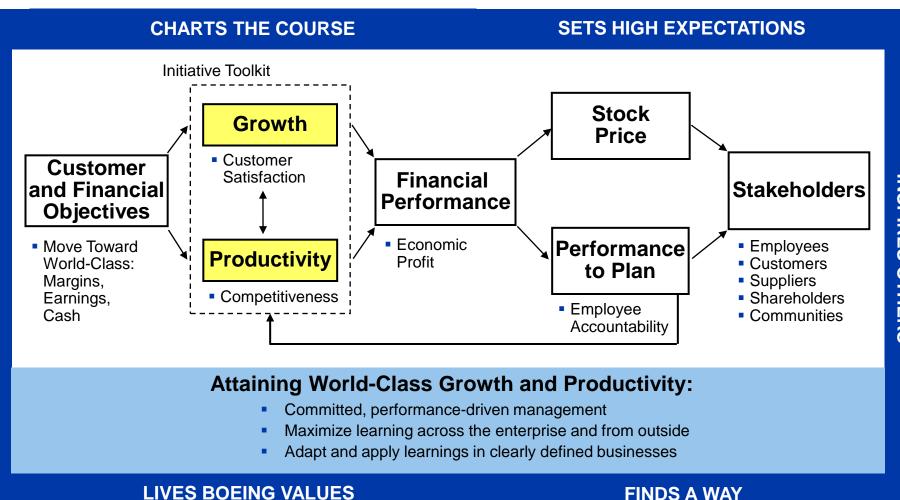




Agenda Topics

- Journey and evolution of Lean+
- Describing Lean+ ...key components
- Lean+ in Action
- Shaping and embedding

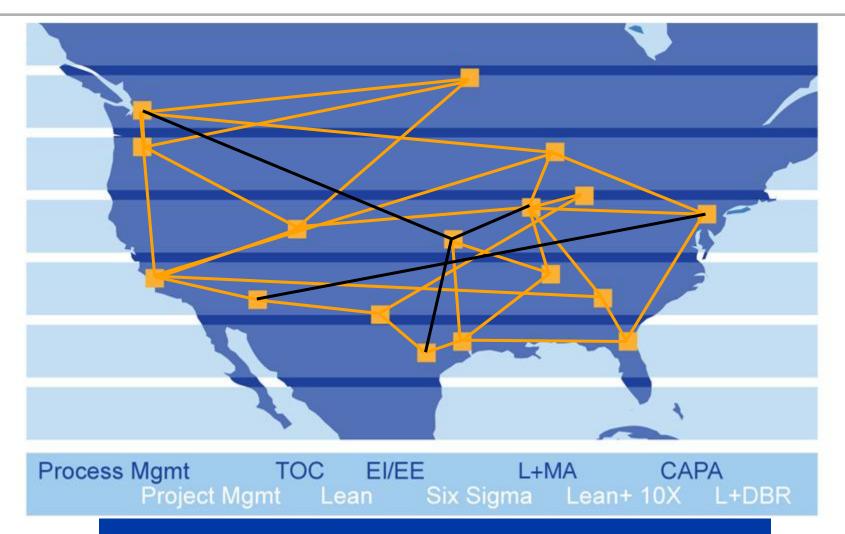
How We Operate: Boeing Management Model



RESULTS

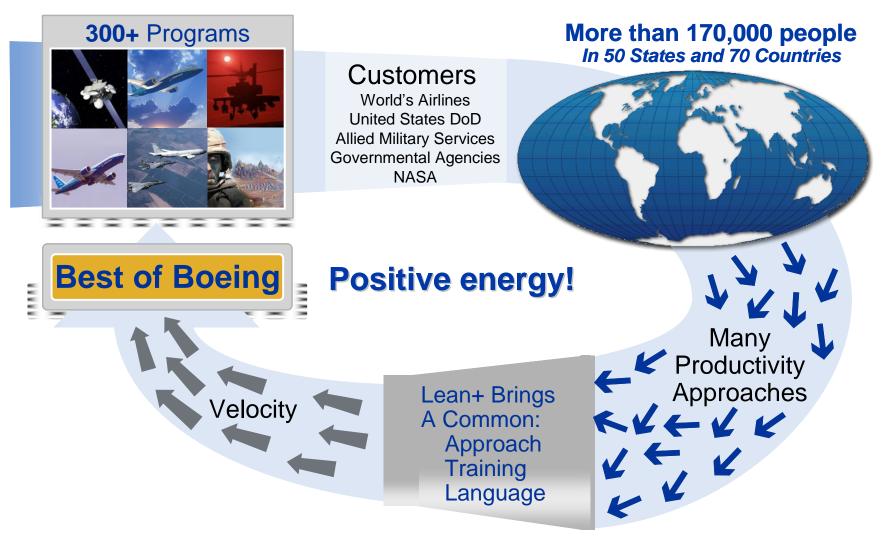
DELIVERS

Evolution of continuous improvement - Lean+



Where you stand ... depends on where you "sit"

Lean+ ... Tying it all together



Lean+ --- Boeing's one overarching continuous improvement approach

The Problem-Solving Process is foundational to continuous improvement at Boeing

Proven continuous improvement methods and tools are integrated into the Process



Continued Focus on the Application of Lean+ with Intent

Corrective Action Preventive Action

Employee Involvement & **Employee Engagement**

Lean

Lean+ 10X Disciplines

Lean+ Design Build Roadmap

Process Management

Project Management

Six Sigma

Theory of Constraints

Capability Maturity Model Integration

Corrective Action Preventive Action

Employee Involvement & Employee Engagement

Lean

Lean+ 10X Disciplines

Lean+ Design Build Roadmap

Process Management

Project Management

Six Sigma

Theory of Constraints

A process improvement maturity model for the development of products and services.

Capability Maturity Model Integration

Corrective Action Preventive Action

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Theory of Constraints

Identifies the actionable root causes of a problem and implements actions that prevent the problem from happening again.

Capability Maturity Model Integration

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Six Sigma

Theory of Constraints

Helps you engage employees by working together to increase ownership, responsibility, and accountability through continuous improvement of work, work environment, and relationships

Capability Maturity Model Integration

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Theory of Constraints

Identifies, prevents and eliminates waste throughout the value stream.

Capability Maturity Model Integration

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Six Sigma

Theory of Constraints

Improves quality and the rate at which work is completed by focusing on finishing the priority work first.

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Theory of Constraints

A product design and build methodology that focuses on optimizing the design of the parts as well as the processes by which those parts are fabricated, assembled and installed.

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Theory of Constraints

Defines processes, establishes responsibilities, evaluates process performance, and identifies and enables opportunities for improvement.

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Theory of Constraints

Used to plan, monitor and control project activities and keep teams on track to meet project requirements

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Theory of Constraints

A structured, data-driven approach to identify variation and reduce defects in products and processes.

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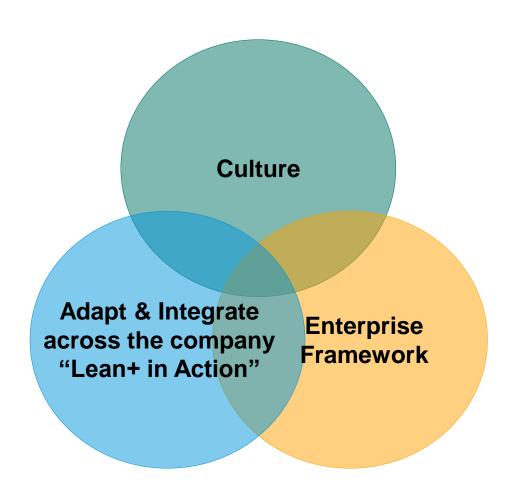
Project Management

Six Sigma

Theory of Constraints

Identifies and manages uncertainty and risk by strategically focusing limited resources on high-impact bottlenecks or constrained areas.

Requires leadership, strategy, commitment, focus ... and a plan



Definition of Culture



- Common set of expected and rewarded values and behaviors shared within a particular group.
- Common way of looking at and behaving that makes the world more predictable because one knows the "rules."
- Underlying assumptions; climate, norms, symbols; shared meanings; formal philosophy; decisions and behaviors.

Influenced by leadership, organization and processes.



Definition of Culture



Leaders must cultivate the culture in their organizations

Cultivation is the relentless pursuit of the desired behaviors

Definition of Culture





Boeing Lean+





Boeing Lean+





Jim McNerney Chairman, President and Chief Executive Officer

"We are on a journey... to build the strongest, best – and best integrated – aerospace company in the world. That requires us to work in ways we never have... to take full advantage of the enormous capability across The Boeing Company."

Lean+ is our foundational initiative, freeing up resources for growth through quality and productivity process improvement

Lean+ Principles

Cu	llture	
Adapt & Integrate across the companum Lean+ in Action	ny Framewor	e ·k
	×	

Focus on the customer	 Ensure that promises made are promises kept Continuously add value for our customer 	
Involve and engage people	 Empower them to design, operate, and improve their work Demonstrate how they fit in the big picture 	
Expect, enable, and ensure first-time quality	 Prevent and eliminate waste Do it right the first time every time Recognize that quality is everyone's responsibility 	
Collaborate and continuously improve our work	Listen, learn, and teachShare and replicate	
Sustain the gains	 Incorporate improvement into daily work Make it the new standard Improve it again 	
Embrace and apply I ean+	Reach beyond traditional organizational boundaries Identify improvement apportunities.	

Embrace and apply Lean+ across the value stream

- Identify improvement opportunities
- Optimize knowledge, skills and capabilities of Boeing people, partners and customers



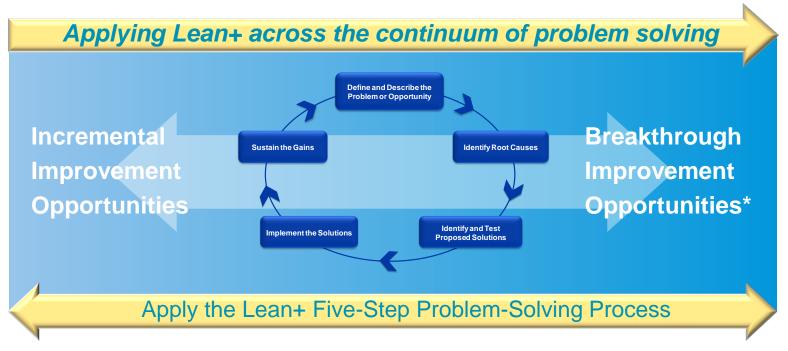






Lean+ Problem-Solving Continuum





*Step function change

Our principled based Five-Step Problem-Solving process provides a foundation

Enterprise Lean+ Integration



Applying Lean+ with Intent

Enterprise Framework

- Integrated organization
- Management system
- Intellectual property
- Education
- Communicating and sharing
- Participate in Industry Councils / Forums

Partner/Consult on business solutions

- Large business system problems
- Design system problems
- Assist and assess maturity
- Integration of Lean+

Enterprise Products

- Lean+: Capturing the Value of Quality
- Common Language
- **Enterprise Curriculum**
- Lean+ Maturity Assist & Assess Methodology
- Lean+ Design Build Roadmap
- Lean+ Web site
- Product / Service **Design/deploy Lean+ Events** Integration & Management

Boeing's ONE Overarching Continuous Improvement Approach

Lean+ *In-Action*Areas of Focus





Lean+ ... Powered by the Passion and Innovation of our People

Lean+ ... Shaping and Embedding





Strong Leadership

- Vision and strategy ... consistent focus
- Sponsorship and engagement
- **Enabling and setting expectations**



Consistent Messaging

- Communication & marketing strategy
- Share and promote successes
- Integration with Lean+ Products & Services



Standard Learning

Accessible

Resources

- Aligned / Integrated enterprise curriculum
- Awareness, Application, and Mastery levels
- Learn-Do model

Enterprise Lean+ Website

Entry points by primary user type

Access to people, processes, and tools

Adapt and Replicate

- Insite Find-it, Ask-it, Share-it
- Collaborative "Knowledge Networks"
- Sharing and replicating successes



Boeing Lean+



Harnessing the energy ... Creating the power

Questions?

Thank You for Attending!

 Feel free to forward questions or recommended topics to

schandler@ame.org

rwebb@apqc.org

