Quick Webinars
Skill Building for NASA's Technical Workforce

Lean Management for Productivity:

Streamline Processes and Improve Communications with Proven Tools

Meet Your Facilitator

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- Certified PMP (Project Management Professional)
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- Published Author
  - *The Passages to Peace* (A Novel)
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  - American Express (15 years)
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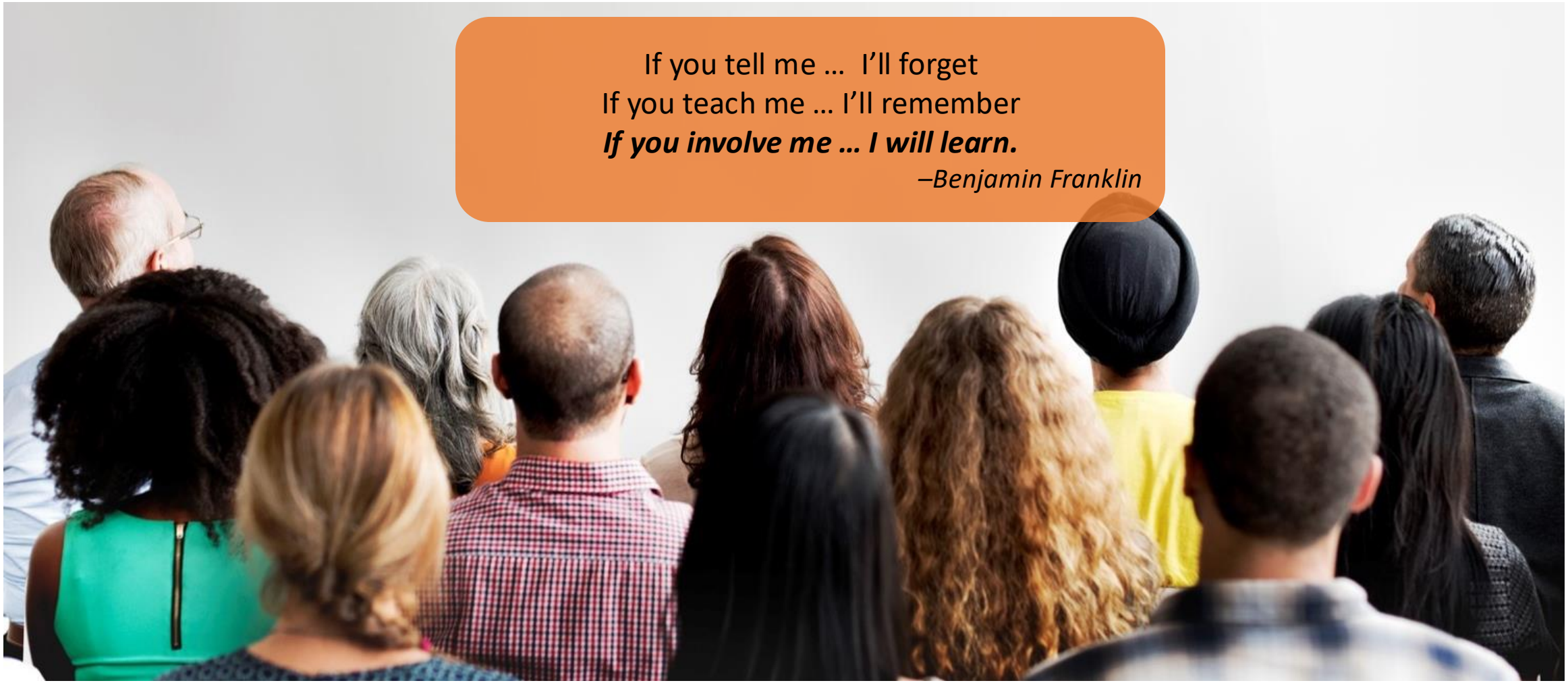

If you tell me … I'll forget
If you teach me … I'll remember
If you involve me … I will learn.
–Benjamin Franklin

Goal for This Session

THIS SESSION IS DESIGNED TO PROVIDE YOU WITH ACTIONABLE INSIGHTS AND PRACTICAL STEPS FOR UTILIZING LEAN TOOLS TO:

- Drive efficiency
- Foster engagement
- Achieve measurable results

Session Topics

- Defining Efficiency Benefits
- Essential Lean Tools and Techniques
- Metric Alignment

Lean is a systematic approach to **improving efficiency** by identifying and eliminating waste in processes, optimizing workflow, and focusing on delivering value to customers. It emphasizes streamlining operations, reducing complexity, and fostering a culture of continuous improvement to enhance quality, speed, and cost-effectiveness.

What are the benefits of improving efficiency?

Benefits of Improved Efficiency

- **Eliminate Waste** – remove non-value time and/or activities.
- **Maximize Value** – deliver value from the customer's perspective.
- **Reduce Cycle Time** – streamline workflows to minimize delays, improve lead times, and enhance responsiveness.
- **Enhance Productivity** – optimize resource utilization (people, equipment, materials) to achieve more output with the same or fewer inputs.
- **Increase Employee Engagement** – foster a culture of problem-solving, accountability, empowerment by involving employees in process improvements.
- **Strengthen Agility and Adaptability** – Build flexible systems that allow for quick adjustments to market demands, customer needs, and external changes.
- **Reduce Costs** – minimize unnecessary expenses through efficient resource management, waste elimination, and process optimization.
- **Promote a Culture of Continuous Improvement** – encourage ongoing evaluation, learning, and iterative enhancements to sustain long-term efficiency and growth.

Session Example

How was your onboarding experience?

Think about past onboarding experiences. How would you describe it?

Which of these represents waste (or inefficiency)?

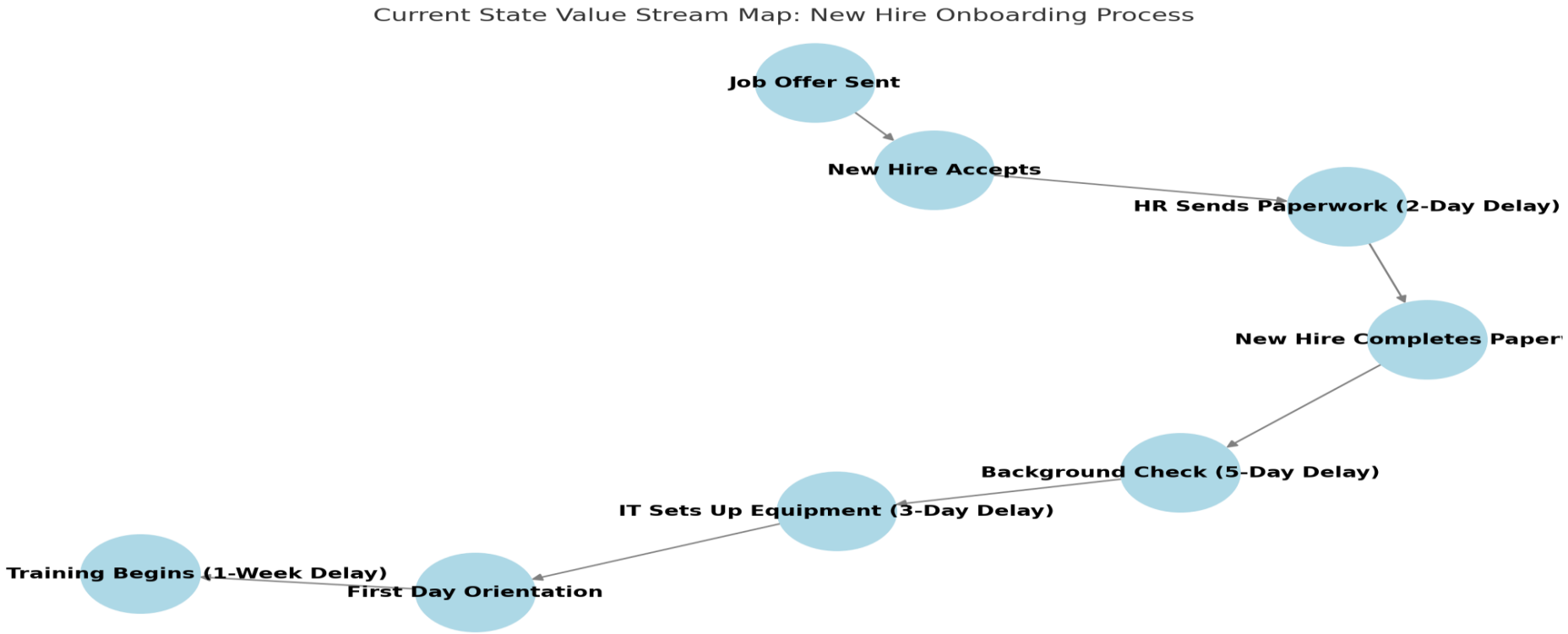
- ❑ New hire has laptop but can't operate systems needed to do work
- ❑ New hire is waiting two weeks for next training class to begin
- ❑ New hire is unable to get into employee portal to fill out employment paperwork

Building a Lean Culture: Mindset and Toolset

Common Lean Tools/Techniques
Value Stream Mapping
5S
Poka-Yoke

Value Stream Mapping: Current State Map

Value stream mapping (VSM) is a tool used to **visually map out** how work flows through a process—from start to finish—to identify **waste, delays, and inefficiencies**.



Value Stream Mapping: Current State Map Drill Down

Key inefficiencies include:

- **HR Sending Paperwork (2-Day Delay) –** Paperwork is not sent immediately after acceptance, causing an unnecessary wait
- **Background Check (5-Day Delay) –** Takes longer than necessary, potentially delaying the new hire's start date
- **IT Setting up Equipment (3-Day Delay) –** Equipment setup isn't pre-planned, leading to delays in productivity
- **Manager Training Begins (1-Week Delay) –** The new hire starts work but has to wait a week before receiving proper training

Value Stream Mapping: Future State

Future State Map – A redesigned version of the process that removes inefficiencies and makes workflow smoother

- **HR Sends Paperwork the Same Day** – Eliminates unnecessary waiting for new hire paperwork.
- **Background Check Reduced to 2 Days** – Streamlined process shortens the time needed for approval.
- **IT Prepares Equipment Before Start Date** – Ensures the new hire has everything ready on day one.
- **First Day Orientation & Manager Training Combined** – Training starts immediately, reducing wasted time.
- **Fully Onboarded & Productive Sooner** – The new hire can contribute faster, improving company performance.

This optimized process removes delays and inefficiencies, resulting in a faster, smoother onboarding experience.

Using 5S to Organize Your Garage

1. **Sort** – Go through everything in your garage and remove items you don't need (e.g., broken tools, unused items, expired products). Donate or throw them away.
2. **Set in Order** – Group similar items together and assign a place for everything (e.g., tools on a pegboard, sports gear in bins, gardening supplies on shelves).
3. **Shine** – Sweep the floor, wipe down shelves, remove cobwebs, and make the space clean and usable.
4. **Standardize** – Label bins, create a tool shadow board, and set rules (e.g., "Lawn tools go back on the rack after use").
5. **Sustain** – Regularly check and maintain organization (e.g., do a quick clean-up once a month to keep the system in place).

Lean Tool/Technique = Poka-Yoke (Error-Proofing)

The first time you make a mistake, it's random. The second time you make the same mistake, it's a choice.

- **Poka-Yoke**, or mistake-proofing, is a Lean technique used to prevent errors before they happen.
- Learning the frequency of occurrence and root cause(s) of the defect allows for process changes to be made so the probability of a repeat error can be reduced if not eliminated.

Error-Proofing Examples

Mistake	Error-Proofing Technique
Invalid form of payment	System flags error
Assembled parts incorrectly	Use color-coded or shape-specific assembly guides
Used expired or incorrect materials	Barcode scanning with automatic detection
Administered incorrect dosage of medication	Use smart infusion pumps with dosage limits
Forgot to process payment	System holds order until payment is confirmed

What techniques do you use to help prevent mistakes?

Building a Lean Culture: Cascading Metrics Aligning to Goals

- Y = f (x) is one of the most important equations you will use to create awareness of current state
- Y is the statistical symbol for an output or result.
- X is the statistical symbol for an input or factor.

Y (Output or Result)	X (Input or Factor)
Product Profit Margin	Materials Cost, Labor Costs, Scrap, Cycle Time
Cycle Time to Onboard Employee in Payroll System	Personal Data, Technology Requirements, Payroll Information, Facilities Information

What Questions Do You Have?

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Thank you for your attendance and participation