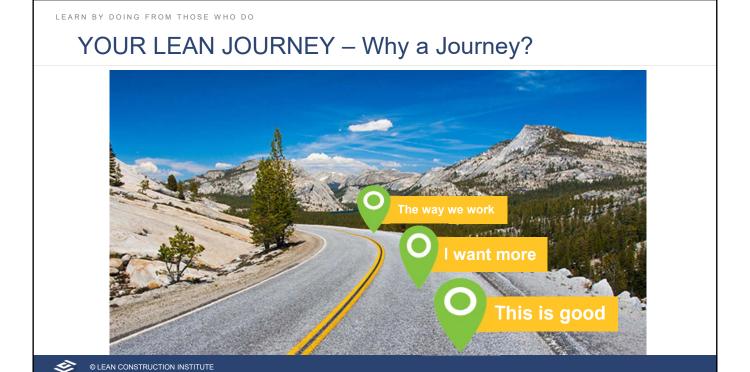




Lean Strategy A3 for:	Crea	ate Your Plan	Last Updated:
1. What is the problem we are trying to solve? Why is this important?	4. Road Map – H	low will we get from here to there? (Key milestones)	How we know we are on track (Measure of Success)
Why?	Date	Description	Measure of Success
2. Current Condition – How do things work today? What is our business stratstrengths do we have? What will inhibit achieving our goals?  Where are we now?  (current state)	(hov	w we get there)	How we know we are on track (KPI & KBI's)
Buildy Balanterin	5. Implement the	e Plan (What actions will we take to reach our next milestones? How are	we doing?
Fill in things that support achieving goals Fill in things that inhibit achievin	g goals Supporting Goals	Activities/Steps	Accountable/ Responsible Metric/Status
3. Target Condition – What kind of organization do we want to be? What is Star"? (Our business strategy, what value we deliver, who we are, our visiour Lean strategy? (How to we produce value?)  Where/who do we want to be? (future state)	on). What is		



Δ

# Lean Organization

### Lean Project

- Lean Organization
- Usually how first experience Lean...
- Improve schedule performance, productivity, quality, safety
- Lower cost
- Less delays and issues
- Involve all parties from owner, design, GC, trades and users.
- ...then we want more.
- Repeat success across all our projects
- Bring benefits of lean thinking and application to all departments and processes.

Lean organizations support lean projects



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Lean Strategy A3 for:		C	Create Your Plan	Last Updated:		
1. What is the problem we are trying to solve? Why is this important?		4. Road Ma	p – How will we get from here to there? (Key milestones)	How we know we are on track (Measure of Success)		
Why?		Date	Description	Meas	sure of Success	
Current Condition – How do things work today? What is our business strategy? What strengths do we have? What will inhibit achieving our goals?						
Where are we in (current state)	now?	5. Impleme	nt the Plan (What actions will we take to reach our next milestones? How are v	ve doing?		
Fill in things that support achieving goals  •	Fill in things that inhibit achieving goals	Supporting Goals	Activities/Steps	Accountable/ Responsible	Metric/Status	Finish, Status, Comments
Target Condition – What kind of organization     Star"? (Our business strategy, what value vour Lean strategy? (How to we produce value)	ve deliver, who we are, our vision). What is	В.				Other possible columns: Start, Finish
Where/who do to be? (future s		6. Continue	ously Improve: What is working? What do we need to change, improve?			Other possible

What does it mean to be lean?

"Lean is a way of thinking, not a list of things to do."

- Shigeo Shingo



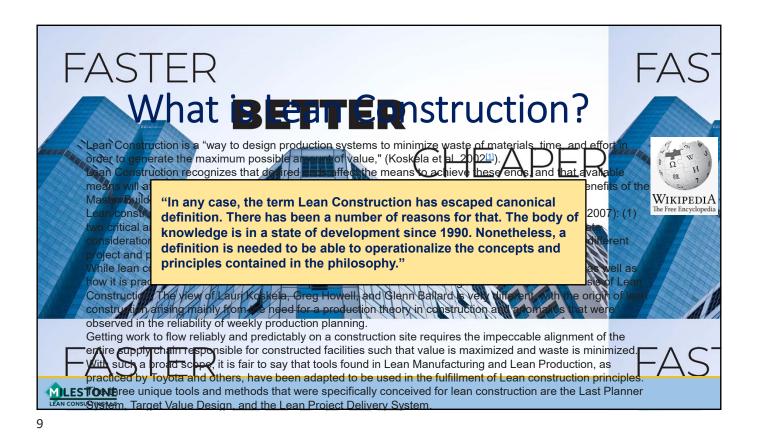
"Lean is a really, really different way of thinking"



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8



Six Tenets of Lean

Lean Construction Institute definition of Lean as applied to projects.

Is it the same for an organization?

Continuous RESPECT FOR PEOPLE

Generate Value

S

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10

**Eliminate** 

Waste

Focus on

# **HOW DO WE DELIVER VALUE?**

Producer



Customer

Lean is a way of thinking about the process of adding value

What distinguishes Lean from other theories of production is the focus on flow efficiency over resource efficiency



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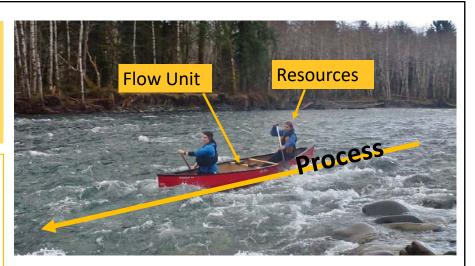
#### WHAT IS LEAN?

Pull value to the customer with the least waste by flow efficiency and do it better and better.

#### **LEAN IS SIMPLE**

It is a way of thinking about how value is produced. The basic concepts are:

- Specify value. Defined by customer.
   Created by producer.
- Waste is anything that doesn't add value.
- Value stream is the set of actions to deliver a product.
- Make the value creating steps flow.
- · Pull value to the customer.
- Aim for perfection.



#### FLOW EFFICIENCY compared to paddling a canoe

Lean thinkers think in terms of process and flow It is the responsibility of everyone in the canoe to improve



#### 9 Critical Attributes of an Organization

**LEADERS** who are humble, ambitious for a purpose beyond themselves and live and lead to the other principles.

VISION of who you are, what you sell, what differentiates you. It is simple and understood by everyone. It guides decisions. FOCUSED DISCIPLINE of thought firmly based in reality and disciplined action that follows through on a plan. Better than bureaucracy. It creates the space and freedom to manage not micromanage.

THE RIGHT PEOPLE with thinking ability, who are trustworthy, humble, self-disciplined and team centered. There is no need to motivate the right people.

**COLLABORATION**. It is the first four principles put into practice. It is everyone "paddling" together.

**FLOW EFFICIENCY** relates to how to produce value. Organize and manage by process, value stream. Produce as efficiently as possible from the point of view of the thing being produced.

disciplined and team centered. There is no need to motivate the right people.

relationships and collaboration. The human

spirit thrives under appreciation and trust.

**RESPECT** which is foundational to

AWARENESS, which is to see everything all the time. It is seeing things as they really are. It is understanding "why". It is the basis for good decisions.

**CONTINUOUS IMPROVEMENT as** 

a fundamental mindset. It is proactive. It is a learning organization. It uses lean thinking to eliminate waste and solve problems. Every member is a problem solver.



#### The people in the canoe

What makes an organization "lean" is the people and how they interact with each other and their work... to deliver value and make work flow efficiently



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LEARN BY DOING FROM THOSE WHO DO

### What is a Lean Organization?

Entire organization focused on pulling value to the customer with the least waste by flow efficiency and doing it better and better

#### **FLOW EFFICIENCY**

- Customer Value
- Waste
- Value Stream
- Flow & Pull
- Perfection

# CONTINUOUSLY

- Processes, systems & capabilities
- Use PDCA
- · Go and observe
- · Solve at lowest level

#### **KEY BEHAVIORS**

- Involve Everyone
- Respect for People
- Lead with humility
- · Deal with reality
- Focused discipline

**CULTURE OF LEAN THINKERS** 



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### Value Stream

The sequence of activities an organization undertakes to deliver on a customer request.

#### **Examples:**

- Project from Notice to Proceed through Final
- Equipment from order to delivery
- · Hiring from request to on board





Wherever there is a request and a deliverable, there is a **value stream** 

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How does value stream management help work to flow?



Focus is on value streams instead of departments

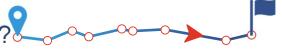
On projects, the Last Planner® System drives focus on workflow efficiency that leads to resource efficiency



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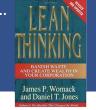
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# How do we get from here to there?



- 1. Be committed to understanding and delivering what is valued by your customers, both internal and your ultimate customer.
- 2. Gradually map your value steams. Manage by value stream. Learn to think in terms of continuous flow.
- 3. Use the Last Planner System on all your projects. Become expert at it.

"The most basic problem is that flow thinking is counterintuitive... shift the focus from organizational categories (departments) to value-creating 'processes."



– James Womack and Daniel Jones, Lean Thinking



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LEARN BY DOING FROM THOSE WHO DO

### What is a Lean Organization?

Entire organization focused on pulling value to the customer with the least waste by flow efficiency and doing it better and better

#### **FLOW EFFICIENCY**

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# How do we continuously improve?

- 1. Design the best process you can
- 2. Document the process (Standard Work)
- 3. Continuously improve the process (Kaizen)



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# Why do we want to do this?

**Continuous Improvement** is the primary way we increase productivity, lower cost of delivery, make the workplace safer, reduce lead times.

By chance? Or design? Which will get better results?



OR



**>** 

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### What is continuous improvement?



A systematic ongoing effort to improve Get better and better at moving the canoe down the river

#### **Continuous**

Ongoing. Never ending. Always looking to improve and a process to do it.

#### **Improvement**

The product
The planning
The production
The paddles
The people



Lean thinkers – Improve the flow of value and reduce the waste.



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#### What is a continuous improvement mindset?

My Job = Doing the Work

+ Improving the Work



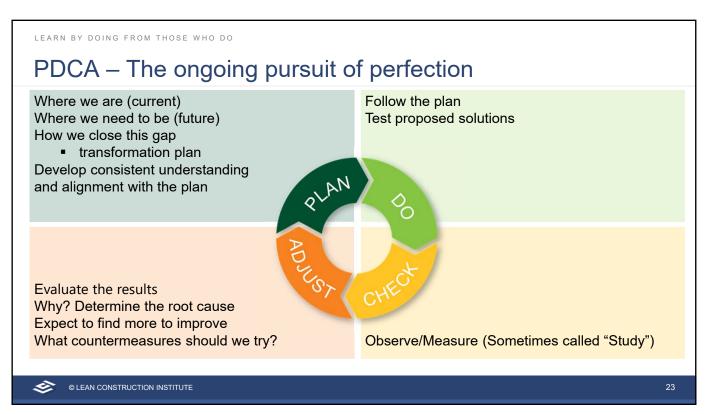
Worker Worker

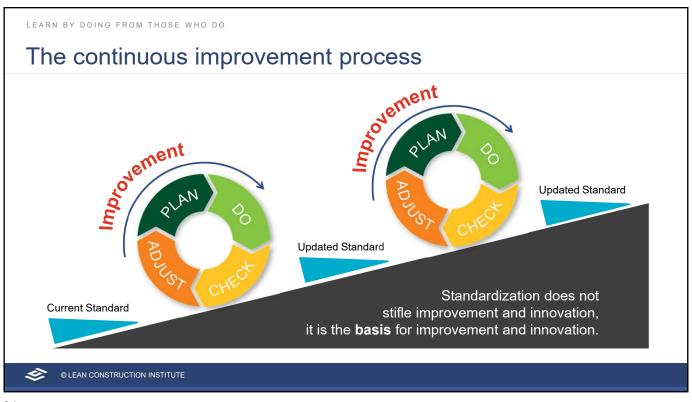
Process

... Everyone PDCA Every Day!

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How do we get there from here?

1. Develop People who apply Lean thinking to their daily work

2. Provide a System (or process) to support them

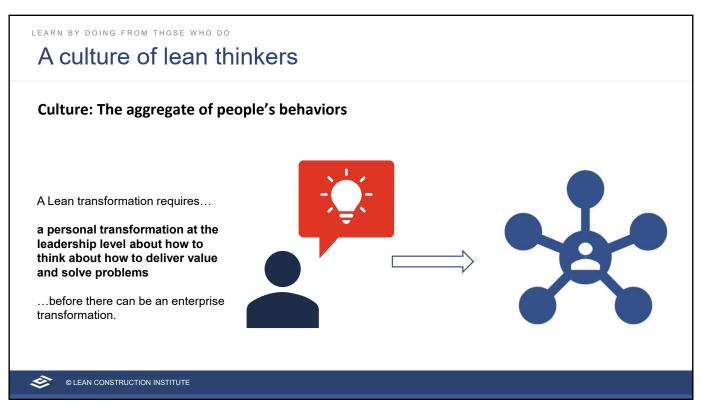
"Train the people doing the work to spot problems and then utilize their knowledge and skills to help improve the work"

- Steven Spear, The High-Velocity Edge

25

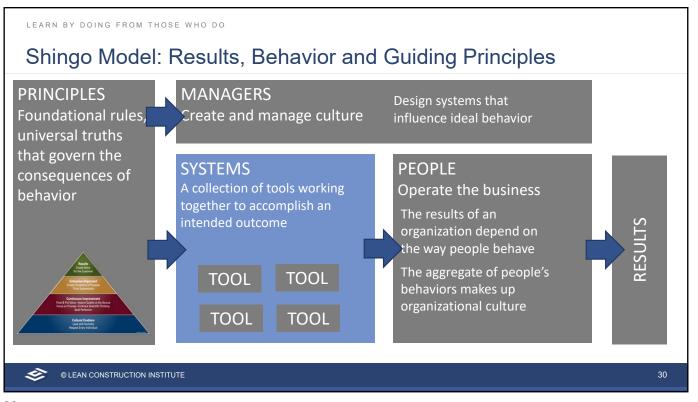
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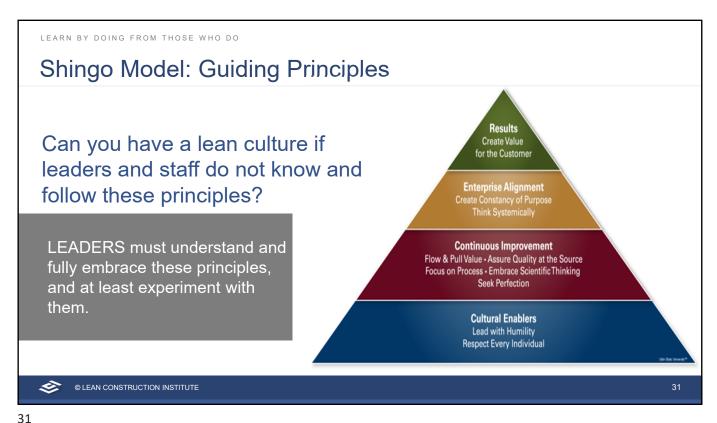
LEARN BY DOING FROM THOSE WHO DO What is a Lean Organization? Entire organization focused on pulling value to the customer with the least waste by flow efficiency and doing it better and better **FLOW EFFICIENCY CONTINUOUSLY KEY BEHAVIORS IMPROVE Customer Value**  Involve Everyone Processes, systems Waste Respect for People & capabilities Value Stream Lead with humility Use PDCA Flow & Pull Deal with reality Go and observe Solve at lowest level Perfection Focused discipline **CULTURE OF LEAN THINKERS** © LEAN CONSTRUCTION INSTITUTE











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### What is a Lean Organization? - Key Take-aways

- Lean projects don't make a Lean organization
- Manage by value stream. Create flow efficiency
- Train people doing the work to spot problems and utilize their knowledge and skills, and your processes to improve the work
- Leaders understand lean principles and design systems built on those principles
- Build behaviors that create a culture of Lean Thinkers
- It's a long journey, but each step brings better results

Entire organization focused on pulling value to the customer with the least waste by flow efficiency and doing it better and better

#### **FLOW EFFICIENCY**

- Customer Value
- Waste
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- Perfection

# CONTINUOUSLY IMPROVE

- Processes, systems
   & capabilities
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#### KEY BEHAVIORS

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Lean Strategy A3 for:	Cr	reate Your Plan	Last Updated:	
1. What is the problem we are trying to solve? Why is this important?	4. Road Map	– How will we get from here to there? (Key milestones)	How we know we are on track (Measure of Success)	
	Date	Description	Mea	sure of Success
Current Condition – How do things work today? What is our business strategy? What strengths do we have? What will inhibit achieving our goals?		gh level roadmap ow we get there)		
		t the Plan (What actions will we take to reach our next milestones? How are w		
Fill in things that support achieving goals  Fill in things that inhibit achieving goals	Supporting Goals	Activities/Steps	Accountable/ Responsible	Metric/Status
	А.			Metric/Status comments: Start, Finish, Status, Comments
Target Condition – What kind of organization do we want to be? What is our "North Star"? (Our business strategy, what value we deliver, who we are, our vision). What is our Lean strategy? (How to we produce value?)				olumns: Start, Fi
Where/what do we want to be?(future state)	6. Continuou	usly Improve: What is working? What do we need to change, improve?		Other possible co

### What is a "lean strategy"?

**BUSINESS STRATEGY** sets the direction: What is our long-term vision? What markets do we serve? What value do we provide to our customers? What differentiates us in the marketplace?

**OPERATIONS STRATEGY** is focused on: <u>How</u> will you produce value? A <u>Lean</u> strategy is to do it as a continuously improving flow efficient organization. It must always connect with the business strategy.

**ROADMAP** is the plan on how you get there.

**JOURNEY** is the implementation of your roadmap.



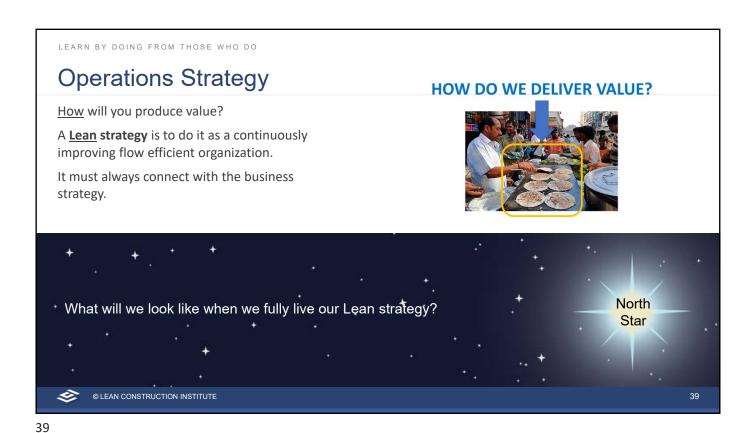
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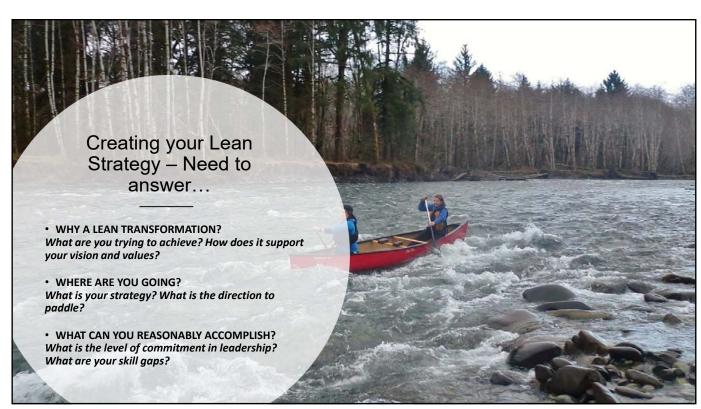


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### Developing YOUR Lean Strategy



The Starry Night - Vincent van Gogh 1889



Paint by Numbers for Adults - Framed Canvas and Wooden Easel Stand - DIY Full Set of Assorted Color Oil Painting Kit and Brush Accessories - Van Gogh The Starry Night 12"x16" Replica

41

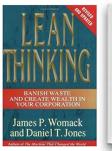
LEARN BY DOING FROM THOSE WHO DO

#### Learn from others "Go and See"

While it is your strategy and your roadmap, there is much to be learned from other organizations and experts.

Understand the underlying principles. Why does it work? What doesn't work so well?

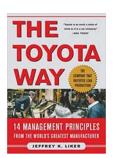
Use what works for you.











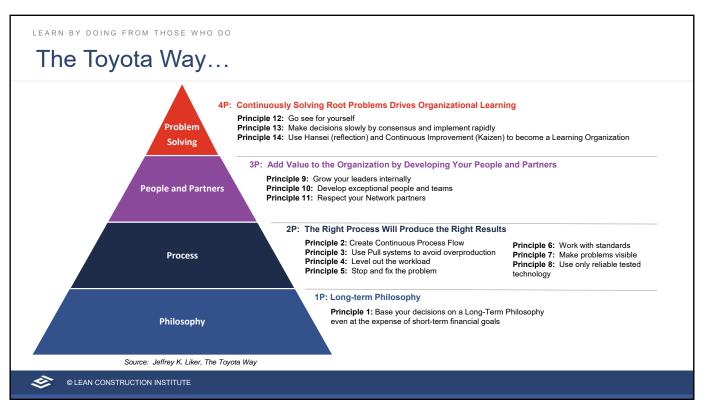
Visit exemplary lean companies

Attend conferences

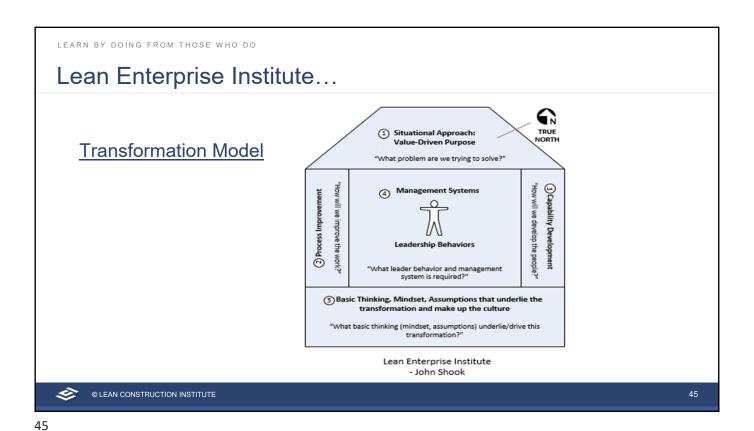
Help from Lean consultants

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4







Other organizations on a lean journey...

Value of the contraction of the contract of the cont

### Roadmap

How do we get from where we are to where we want to be?



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# Creating Your Road Map

#### **HOW DO WE GET THERE?**

Start with the right question...

Where are we going?

Where are we now?

Then can better answer HOW.





This is a journey you can start without the whole plan Get pointed in the right direction

Identify a project, department, value stream to start Keep learning so you can see the road ahead better Adjust as you go



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#### **Creating Your Road Map**

#### **MILESTONES**

Set achievable milestones that progressively build a lean organization.

Don't add more detail than you are ready to implement. It will change.

Pull planning is one element of developing the road map.



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### What are some possible milestones?

- · Leadership has good understanding of Lean thinking
- Staff understands basic lean concepts
- · Last Planner System on all projects
- 5S in the shop
- Value Stream Map fully implemented on a value stream
- Process and resources in place for continuous improvement

What are some possible milestones for your organization?

Entire organization focused on pulling value to the customer with the least waste by flow efficiency and doing it better and better FLOW EFFICIENCY

- Customer Value
- Waste
- Value Stream
- Flow & Pull
- Perfection

#### CONTINUOUSLY **IMPROVE**

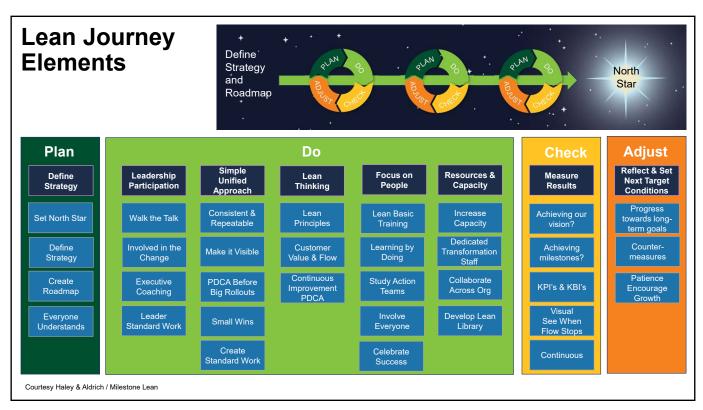
- Processes, systems & capabilities
- Use PDCA
- Go and observe
- Solve at lowest level

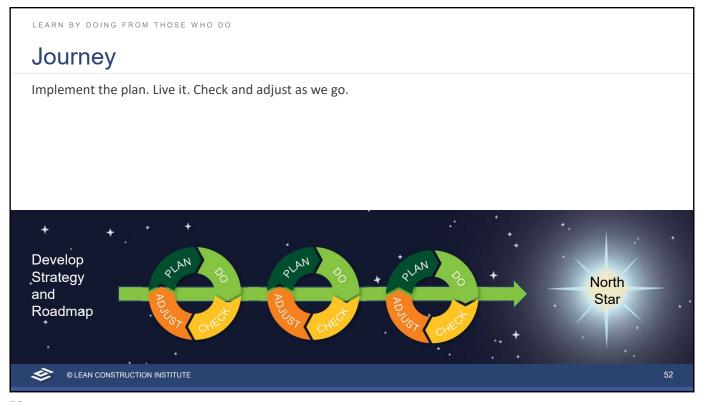
#### **KEY BEHAVIORS**

- Involve Everyone
- Respect for People
- Lead with humility
- Deal with reality
- · Focused discipline

- Determine timing and sequence of the milestones
- Determine the steps needed to achieve each milestone
- Arrange for learning and resources to support the plan

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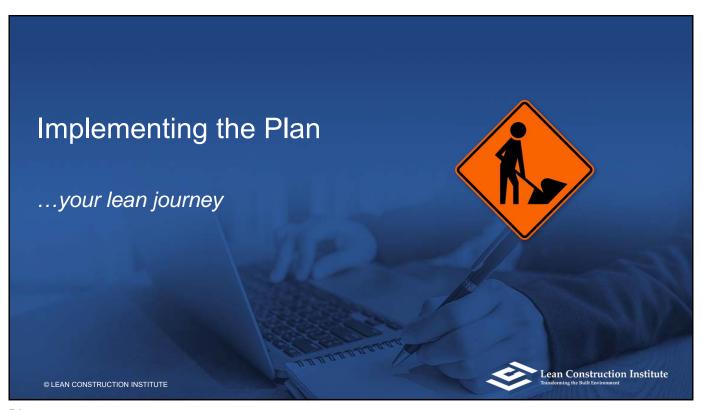


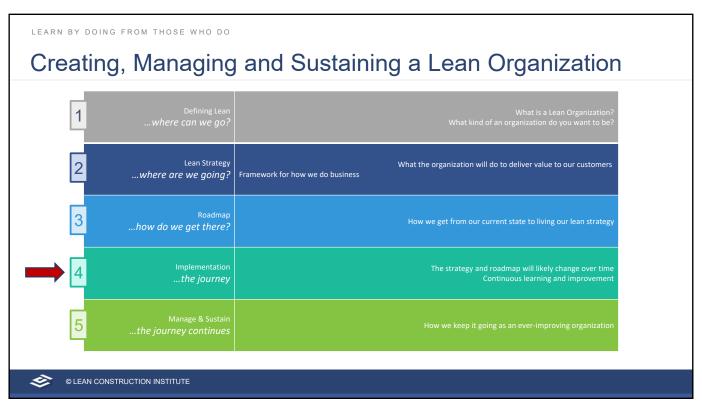
#### Creating your Lean Strategy & Roadmap - Key Takeaways

- · Determine what is possible. Create a Lean operations strategy in support of long-term business goals
- Learn about Lean principles and practice. Study examples of others. But make it your own.
- Create your roadmap Identify achievable milestones and a timeline of steps to get there.
- · Make sure your organization has the attributes, resources, and leadership to support the plan
- · Don't make it overly detailed. Expect it to change.



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Lean Strategy A3 for:		C	reate Your Plan	Last Updated:	
1. What is the problem we are trying to solve?	Why is this important?	4. Road Map – How will we get from here to there? (Key milestones)  How we know we are on track (Measure		Measure of Success)	
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		5. Impleme	nt the Plan (What actions will we take to reach our next milestones? How are v	we doing?	
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3. Target Condition – What kind of organizatistar? (Our business strategy, what value vour Lean strategy? (How to we produce val	ve deliver, who we are, our vision). What is	E. C.	Implement the Pla (to first milestones	n e	Other possible columns: Start, Finish, Status, Comments
		6. Continu	ously Improve: What is working? What do we need to change, improve?		

# Keys to Success & Pitfalls to Avoid

What are the essential keys to success (will fail if don't have these)?

Discuss with your table group then report

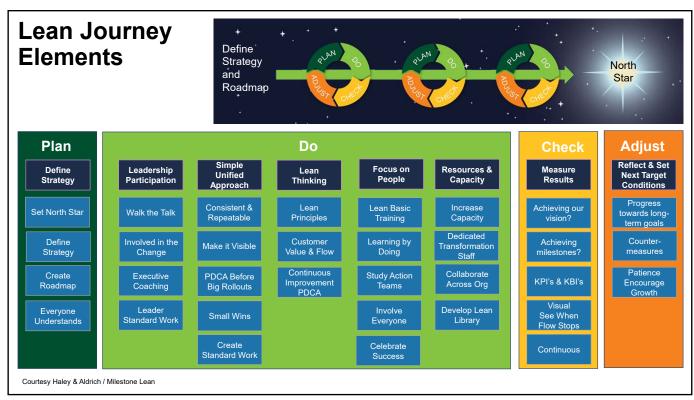
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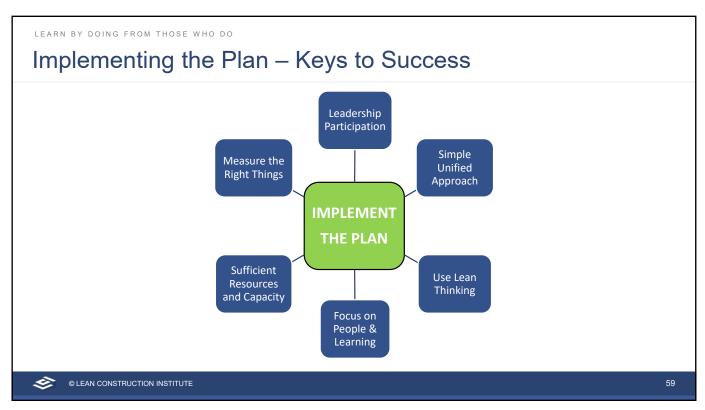


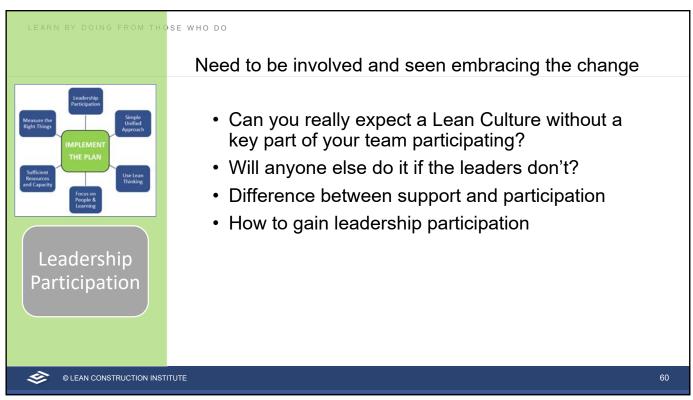


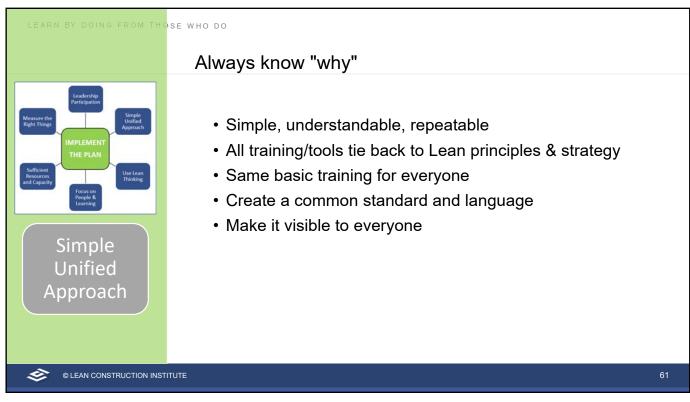
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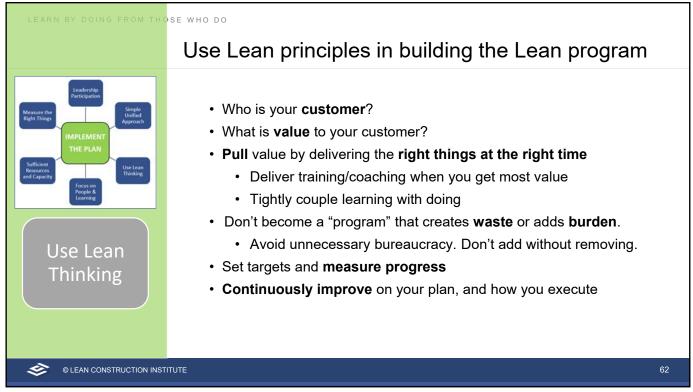
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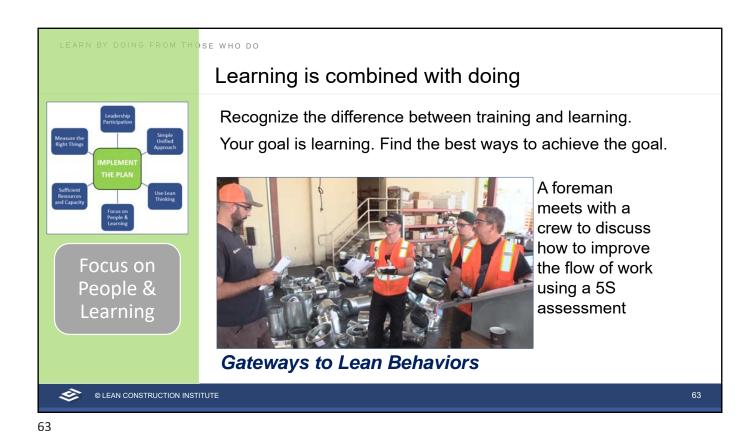












LEARN BY DOING FROM THOSE WHO DO Gateways to Lean Behaviors - Some possible first steps... **5**S **Study Action Teams** Value Stream Mapping **Last Planner System** Sort, Straighten, Shine, Standardize, Sustain Learn to see and remove waste. discipline to follow through, while creating a safer, more productive workspace With good coaching, a team learning how to build respect, Learn to manage by value trust, and communication. stream, to see the whole and not They practice pull, focus on the just the parts, to recognize how value stream, achieving work flows, to break down milestones, and removing waste barriers between departments Book club with a purpose Teams work together to see the As a team or group learns current state, future state and together, they find practical build and implement a ways to apply the learning to transformation plan to get there their work © LEAN CONSTRUCTION INSTITUTE



LEARN BY DOING FROM THOSE WHO DO Collaborate Across the Enterprise Central Lean Team provides structure, tools, and links everyone · Dedicated local lean Leadership managers are close to the Support **Project** people and the work Team · Project teams and departments grow champions, who become **Project** Local Lean Local Lean Central Lean Team future lean leaders Team Manager Manager · Communication grows between teams and offices and work becomes Office/Dept. standardized for collaborative Local Lean improvement Manager © LEAN CONSTRUCTION INSTITUTE

Dedicated staff and a collaborative process prevents "reinventing the wheel" and leads to standardization that can be shared across the enterprise.

#### **LEARN**





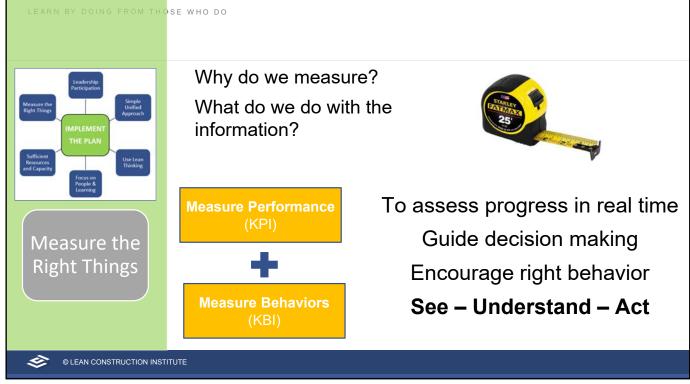


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#### Measure What?

Measure Performance (KPI)



Measure Behaviors (KBI)

Be careful what you measure Because that is what you will get



Example: We set an interim milestone on our roadmap... Use the Last Planner System on all our projects in a region

What do we measure?

Why did we set the milestone? How does it help us achieve our vision?

Is our goal to have every team "do" the Last Planner System?

#### In your breakout...

Take five minutes and discuss what to measure. Report back with the best measurements and why.

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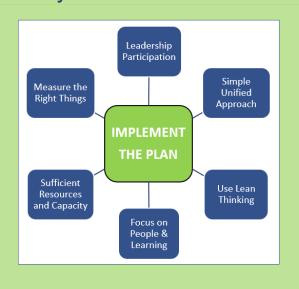
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THE ABCS OF LEAN: TRANSFORMATION THROUGH ACTIONS, BEST PRACTICES AND COACHING

### Implementing the Plan - Keys Takeaways

- · Leaders act as change agents
- · Keep the purpose simple and compelling.
- Use the same Lean thinking to implement the roadmap that you are trying to build into your organization. You will get much better results.
- Create a common standard for lean that can apply across the enterprise
- Tightly couple learning with doing and learning by doing.
- Get expert help and build capacity in local Lean leaders.
- Never lose sight of your "North Star". Set milestones that progressively help you achieve your Lean Strategy. Measure to those milestones.



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Creating, Managing and Sustaining a Lean Organization						
1	Defining Lean where can we go?	What is a Lean Organization? What kind of an organization do you want to be?				
2	Lean Strategy where are we going?	What the organization will do to deliver value to our customers Framework for how we do business				
3	Roadmap how do we get there?	How we get from our current state to living our lean strategy				
4	Implementation the journey	The strategy and roadmap will likely change over time Continuous learning and improvement				
5	Manage & Sustain the journey continues	How we keep it going as an ever-improving organization				
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THE ABCS OF LEAN: TRANSFORMATION THROUGH ACTIONS, BEST PRACTICES AND COACHING

# What is "sustaining" a Lean Organization?



Like ice melting in a drink, gradually, Lean is no longer an initiative. It is the way you work.



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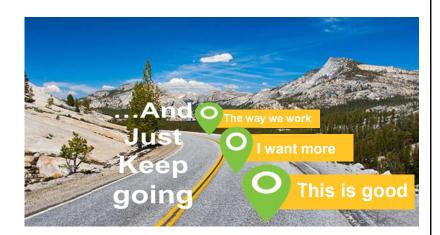
THE ABCS OF LEAN: TRANSFORMATION THROUGH ACTIONS, BEST PRACTICES AND COACHING

### Key to Success – Your journey never ends

It is not how fast you go It is that you keep going

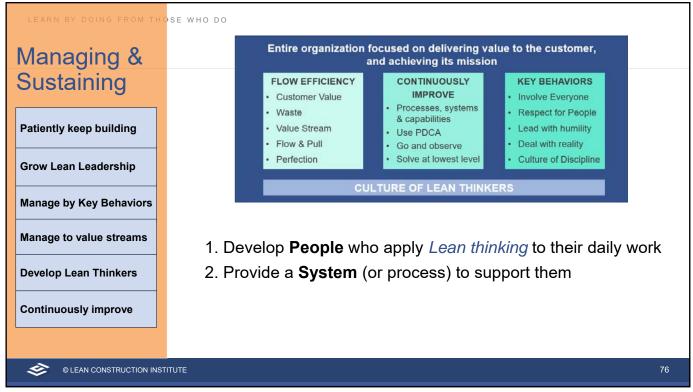
And get better and better at doing this...

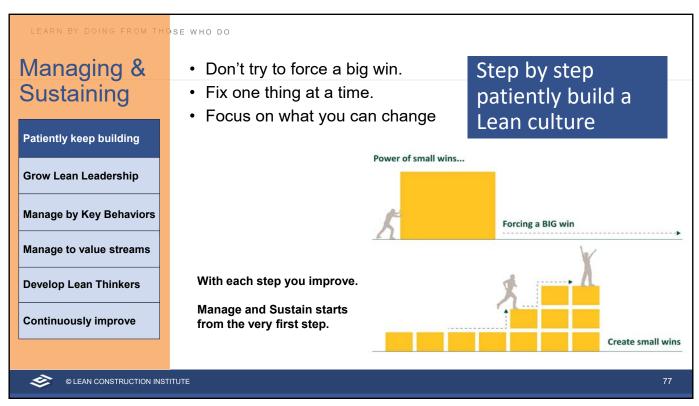


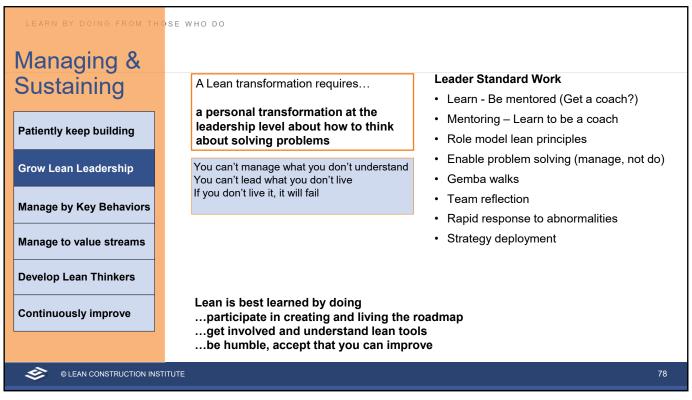


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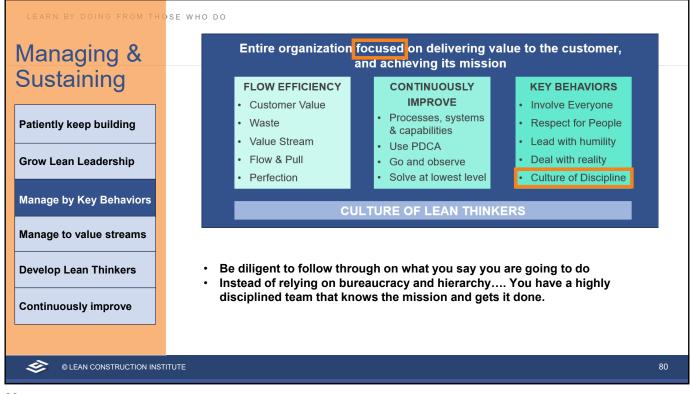
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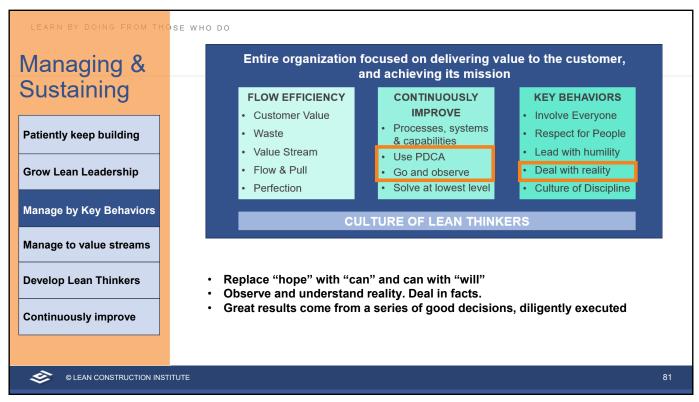


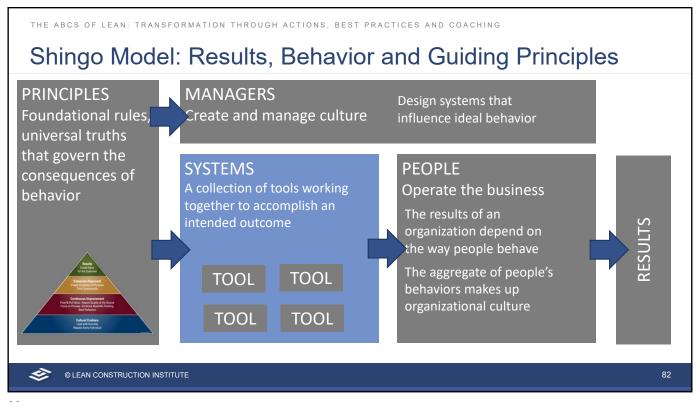


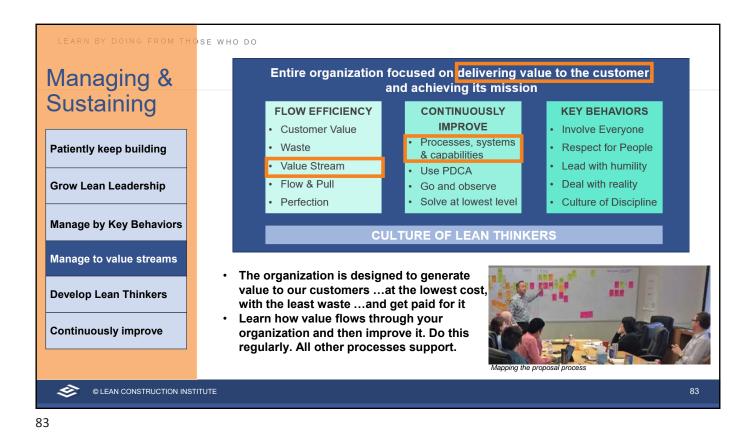












LEARN BY DOING FROM THOSE WHO DO Managing & Entire organization focused on delivering value to the customer, and achieving its mission Sustaining **FLOW EFFICIENCY** CONTINUOUSLY **KEY BEHAVIORS IMPROVE Customer Value** Involve Everyone Processes, systems Respect for People Patiently keep building Waste & capabilities Value Stream Lead with humility Use PDCA Flow & Pull Deal with reality **Grow Lean Leadership** Go and observe Solve at lowest level Culture of Discipline Perfection Manage by Key Behaviors **CULTURE OF LEAN THINKERS** Manage to value streams Management team must be lean thinkers. Training and succession plan ensures the culture **Develop Lean Thinkers** beyond a single leader. The job of everyone is to improve the flow of value Continuously improve © LEAN CONSTRUCTION INSTITUTE





### Managing & Sustaining – Key Takeways

- Involved Leadership is required to sustain a culture of Lean thinkers.
- Set new targets for the lean program as you go.
- Never lose sight of your "North Star". Your competitive edge is the value you deliver and that you can do it better, faster and cheaper.
- Be a learning organization. Everyone is involved in improving flow of value every day. Keep investing in your people because people create value.
- Have a process for not only capturing, but implementing, improvements as standard work.
- Have fun. Celebrate success. Everyone wants fulfillment beyond a paycheck.

Patiently keep building

**Grow Lean Leadership** 

Manage by Key Behaviors

Manage to value streams

**Develop Lean Thinkers** 

**Continuously improve** 

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Plus: What produced value during the session?

Delta: What could we change to improve the process or outcome?