



Co-Learning Partnerships



What is a Co-Learning Partnership (CLP)?

“Co-Learning” means everyone learns from each other.

Partners develop their lean thinking and capabilities as LEI coaches guide them through addressing a business problem. Partners also learn from one another when LEI brings them together to share their lean experiences. This approach enables LEI to discover new ways to advance lean thinking and practice.

Why Partner with Us?

Executives look to LEI’s CLP program to help them improve their organization’s performance.

LEI offers custom learning experiences in three critical areas:

- **Executive Leadership** – improving strategy execution by ensuring the alignment and deployment of your strategic objectives from the c-suite to frontline associates.
- **Product Development** – accelerating the development of the design and delivery of innovative products your customers will love and that drive top-line growth.
- **Operations** – establishing or strengthening a continuous improvement mindset and practices that steadily and progressively enhance all aspects of production and, in turn, business performance.

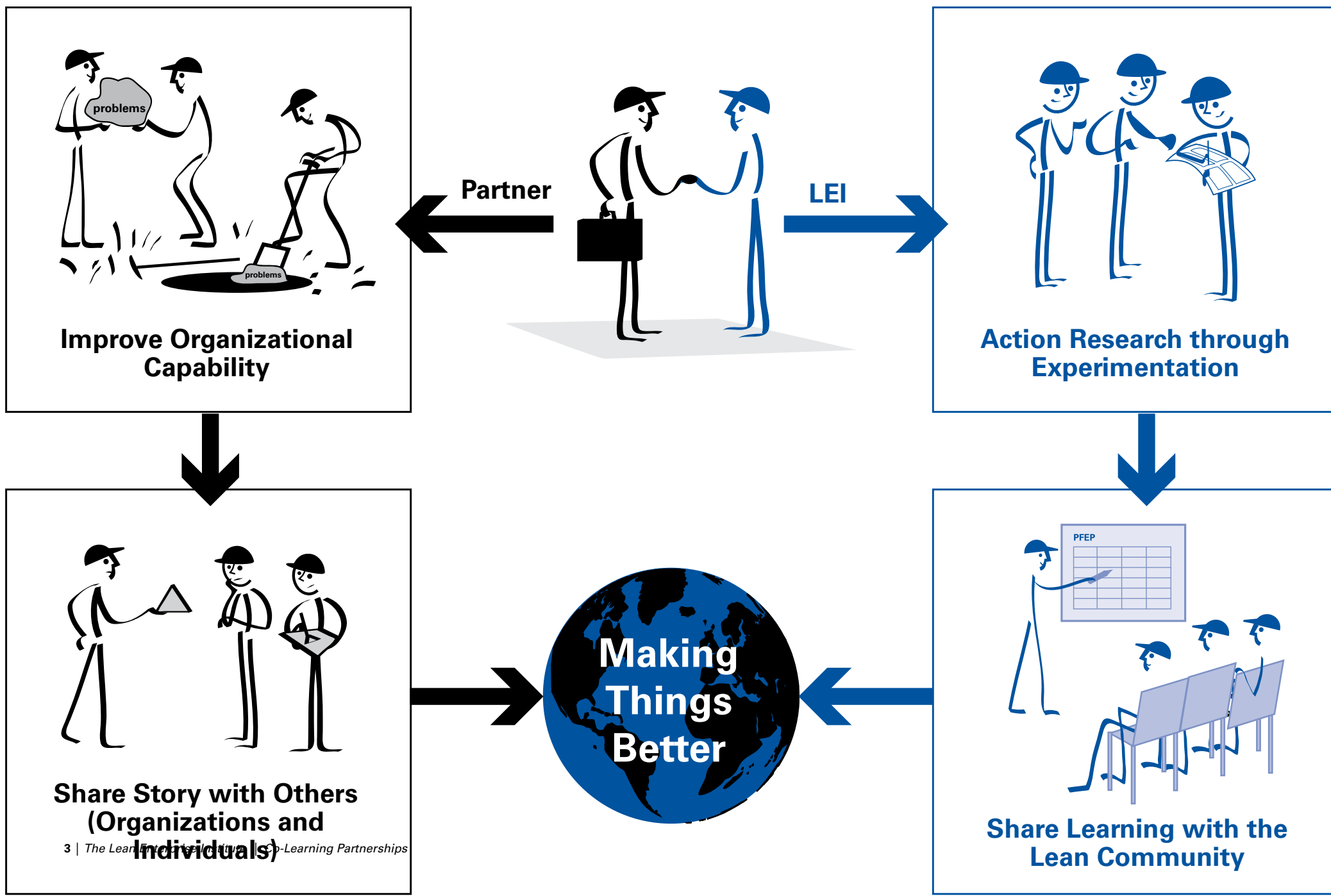


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If the learner hasn’t learned,
then the teacher hasn’t taught.



Co-Learning for a Higher Purpose





“

Lean thinking is about, more than anything else, rethinking, reimagining what work can be.



What is Lean?

Lean is a way of thinking about creating needed value effectively with increasingly fewer resources and less waste. Lean thinking starts with understanding customer value.

Lean is a practice of continuous experimentation to achieve perfect value with zero waste.

A lean enterprise strives to continuously understand its customer and relentlessly pursue better ways to create and deliver value:

- through product development
- during fulfillment from order through production to delivery
- through the product's use-cycle from delivery through maintenance and upgrades to recycling.

An executive who adopts lean thinking and practices develops a gemba-based approach to managing based on the principles of respect for people and continuous improvement.

Why Lean Thinking and Practice?

It improves work processes.

Through careful design of the work and ongoing experimentation, workers and managers learn by doing, monitoring, and innovating in their work processes — whether physical or knowledge work — to achieve better business outcomes and greater worker engagement.

Our Philosophy

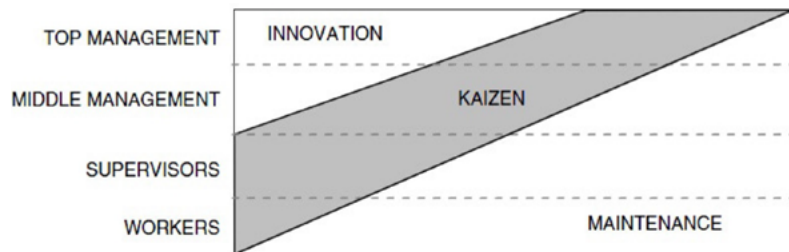
Learn by Doing

LEI will never try to impose a preconceived plan, solution, or model on its Partners; doing so would go against our fundamental philosophy.

Instead, we fervently believe every situation is unique, requiring a novel set of countermeasures to resolve its problems or improve its performance. So, our approach is to guide Partners in designing and evaluating experiments that lead to discovering process changes that yield better performance outcomes. This method allows LEI and the Partner to address fundamental questions of purpose, process, and people specific to the situation they need to address.

In other words, engagements with LEI abide by the principle: learn by doing.

Engage with Every Level of the Enterprise



Partnerships are customized to help leaders develop capabilities at any level of the organization to ensure a Partner's lean transformation is sustainable.



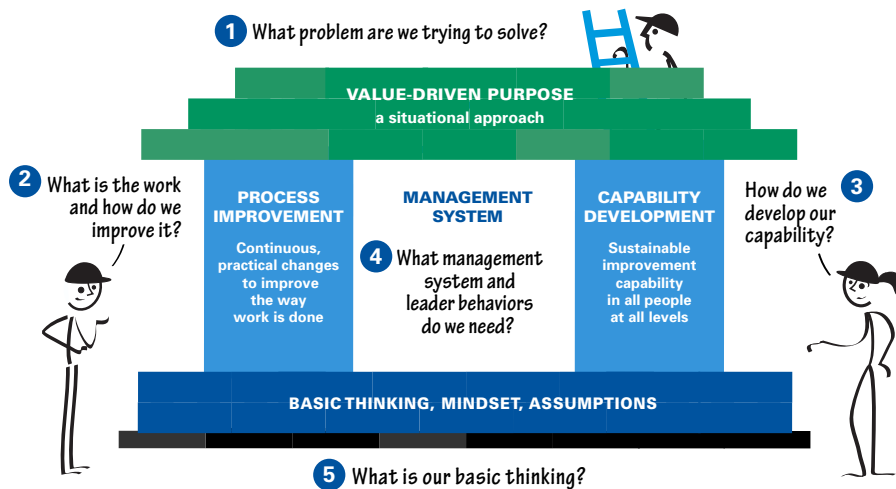
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What can you do next to make a difference in your organization?





The Lean Transformation Framework



A Co-Learning Partnership does not begin with a preconceived plan. Instead, LEI coaches guide Partners through the Lean Transformation Framework (LTF) and coach them on how to apply lean thinking and practices situationally.

The LTF addresses fundamental questions of purpose, process, and people.

To learn more about the LTF, [watch the video](#).

How a Restaurant Group Responded to the 5 Fundamental LTF Questions

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|--|--|
| 1 What is the value-driven purpose? Or what is the problem to solve? | <ul style="list-style-type: none">■ Improve the profitability of the restaurant while maintaining high-quality standards. |
| 2 What is the work to be done (to solve the problem)? | <ul style="list-style-type: none">■ Establish waterspider to enable cooks to stay focused on the value-added work of cooking.■ Establish a just-in-time prep station to supply fresh ingredients continuously to cooks and reduce inventory.■ Apply 5S practices in walk-in coolers to increase storage density, eliminate searching, and simplify inventory counting. |
| 3 What capabilities are required (to do the work to solve the problem?) | <ul style="list-style-type: none">■ Train everyone on how to see work versus waste, thereby enabling kaizen (continuous improvement).■ Introduce A3 problem-solving to break down, analyze, and solve the root cause of problems. |
| 4 What management system — operating system and leadership behaviors — is required? | <ul style="list-style-type: none">■ Introduce daily management huddle to identify and address problems quickly.■ Transition from having leaders solve all problems to coaching others to solve problems. |
| 5 What basic thinking, including mindsets and assumptions, are required by the organization as a purpose-driven socio-technical system? | <ul style="list-style-type: none">■ Change mindset from blaming the cooks to blaming the process for failures.■ Start viewing cooks as problem solvers who can improve their work processes, not just as a set of hands that cook. |

Restaurant Group

Proven Results

- Improved profitability of the largest restaurant by 2.2%
- Reduced kitchen labor in the largest restaurant by 30% during the busy summer season
- Eliminated food waste, such as raw clams (\$30k annually) and fruit (\$40k annually)
- Reduced lead time from customer order to service by 19% in one location

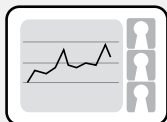
Learning Experiences Beyond CLP Coaching

- Joined a week-long kaizen activity in Barcelona at a model café company
- Hosted a week-long kaizen activity in Boston for hospitality leaders
- Joined an LEI-sponsored Executive Learning Tour to Japan
- Attended Lean Summits, 2016 through 2019
- Trained leadership in A3 problem-solving
- Partnered with Toyota Supplier Support Center to increase the capacity of the fish processing facility

Learn More About the Restaurant Group's Lean Transformation Experience



Read the Case Study:
How Organizations Can Increase Profitability While Improving the Work Environment



Watch the Lean Summit Presentation:
Meaningful Problem Solving: Solving Problems Customers Care About



Listen to the Podcast:
Port to Plate, Lean Changes the Restaurant Industry



“When we began to look closely at the work and break it down between value-add, nonvalue-add, and waste, we realized the jobs were hard to do successfully and frustrating for workers.”

**— Rich Vellante
Former Executive Chef**



About the Lean Enterprise Institute

Making things better by advancing lean thinking and practice

The Lean Enterprise Institute (LEI) is a 501(c)(3) nonprofit organization based in Boston, MA.

LEI's mission is to help organizations make things better for their customers, employees, owners, and society-at-large by advancing lean thinking and practice.

Founded in 1997 by management expert James P. Womack, PhD, LEI conducts action research into the latest ideas for leadership and management in partnership with organizations tackling real business challenges using lean thinking and practice.

In this way, LEI learns by doing and then develops insights into content and learning experiences that grow the lean community and build its capacity for improvement.

LEI's lean coaches are more than just consultants. They have extensive experience as lean practitioners and leaders in their former organizations, equipping them to provide skilled coaching to develop your lean thinking and practice.

Learn more about LEI at lean.org.



150+

**Years of Lean
Coaching
Experience**

29,000+

**People
Trained**

150+

**Partner
Companies
Coached**

Industries LEI's worked in:

- Engineering
- Finance
- Government
- Healthcare
- Hospitality and Services
- IT and Software
- Logistics and Transportation
- Manufacturing
- Mining, Oil and Gas
- Non-profit
- Pharmaceutical

Lean.org

- 4,000+ Articles
- Case Studies
- Webinars, Videos, and Podcasts

Learning Materials

- Books
- Workbooks
- Training Kits
- Teaching Essentials

Education

- On-Demand Online Courses
- Live Online and In-Person Courses
- Custom Training

Summits

- The Lean Summit

Co-Learning Partnerships

- Strategy and Executive Leadership
- Product and Process Development
- Operations and Continuous Improvement

Lean Global Network

- 23 Institutes Around the World



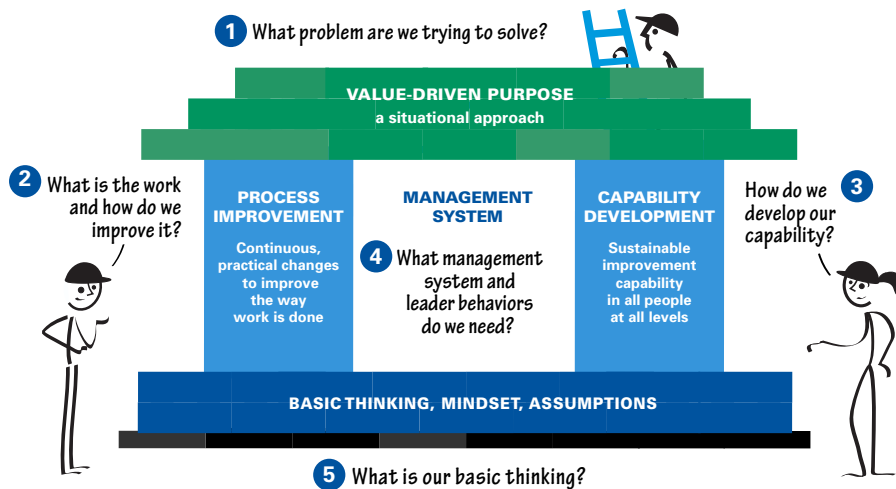
Lean Enterprise Institute

Making Things Better by Advancing
Lean Thinking and Practice

**Learn more and connect with
us at lean.org/clp**



The Lean Transformation Framework



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The LTF addresses fundamental questions of purpose, process, and people.

To learn more about the LTF, [watch the video](#).

How Turner Construction Responded to the 5 Fundamental LTF Questions

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| 1 What is the value-driven purpose? Or what is the problem to solve? | <ul style="list-style-type: none">■ Set an aspirational objective: Living Injury-Free Every Day.■ Establish a measurable goal: Cut safety incidents by 50% in one year. |
| 2 What is the work to be done (to solve the problem)? | <ul style="list-style-type: none">■ Observe the work to gain an in-depth understanding of safety incidents' root causes.■ Experiment with a series of countermeasures, check that they are effective, then implement them and continuously improve. |
| 3 What capabilities are required (to do the work to solve the problem?) | <ul style="list-style-type: none">■ Adopt the A3 methodology to solve problems and develop problem solvers.■ Teach leaders how to become effective coaches through LEI's Lean Leader Program. |
| 4 What management system — operating system and leadership behaviors — is required? | <ul style="list-style-type: none">■ Adopt hoshin kanri to build horizontal alignment among leadership and vertical alignment from executives to workers.■ Institute a weekly safety review meeting with jobsite leaders and executives to understand safety incidents and, when necessary, provide resources to address them permanently. |
| 5 What basic thinking, including mindsets and assumptions, are required by the organization as a purpose-driven socio-technical system? | <ul style="list-style-type: none">■ Solve problems through facts versus assumptions.■ Develop people through coaching versus providing answers. |

COMPANY

Turner Construction Company

Proven Results

- Reduced panel installation time by 50% and cable installation time by 90% at two projects
- Reduced curtain wall installation damage by 95% on a major NYC project
- Reduced safety-incident rate from 5 to 1.26

Learning Experiences Beyond CLP Coaching

- Joined two LEI-sponsored Executive Learning Tours to Japan
- Convened a 100-person team at the Lean Summit in 2019
- Participated in LEI's Lean Leader Program to rapidly develop capable problem solvers and problem-solving coaches
- Visited MillerKnoll to see practitioners use lean thinking in a day-to-day work environment

Learn More About Turner's Lean Transformation Experience



Read the Case Study:
Meeting Strategic
Objectives



Read the Case Study:
Respect for People:
Making the Job Easier
for Workers



Watch the Webinar:
How A3 Management
Solves Problems and
Develops Problem-Solving
Capabilities



Turner

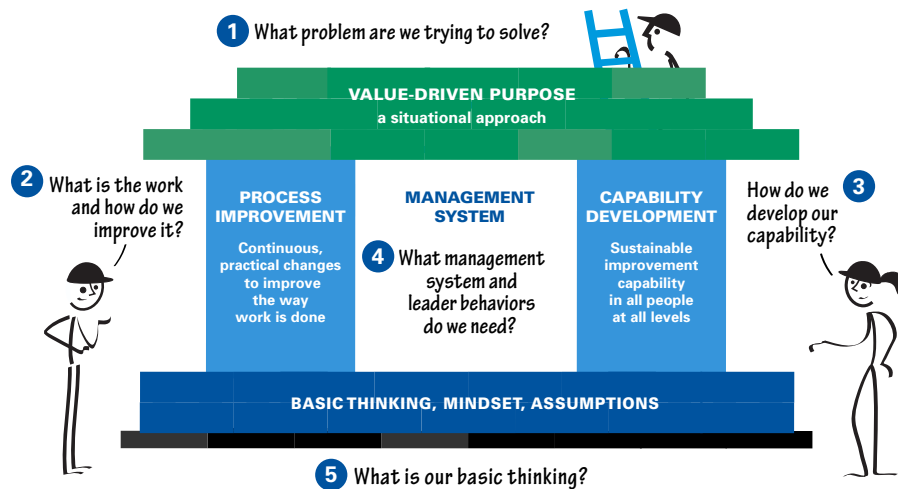
“LEI coached us on how to approach problems and solve them permanently. But we did not want to be tethered to them for the next 100 years. Through LEI’s ‘train-the-trainer’ method, we learned how to coach others in problem-solving.”

— Charlie Whitney
Vice President and General Manager
Turner Construction Company





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How GE Appliances, a Haier Company, Responded to the 5 Fundamental LTF Questions

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|---|--|
| <p>1 What is the value-driven purpose? Or what is the problem to solve?</p> | <ul style="list-style-type: none"> Set a high-level business objective: Re-shore manufacturing from China to the United States while maintaining competitive costs. Set a plant-floor-level business goal: Increase production and quality of refrigerators on a mixed-model assembly line. |
| <p>2 What is the work to be done (to solve the problem)?</p> | <ul style="list-style-type: none"> Improve material and information flow using a combination of kitted parts sequenced to the line and small inventory stores held lineside. Reduce the foam injection machine's cycle time by 26% with zero capital expenditure. Level production schedule to make every model every day. |
| <p>3 What capabilities are required (to do the work to solve the problem?)</p> | <ul style="list-style-type: none"> Institute "attack the gap" training to troubleshoot lineside problems rapidly. Create a development program for key leaders around standardized work, problem-solving, and shopfloor management. Train dozens of team leaders to support lineside operators. |
| <p>4 What management system — operating system and leadership behaviors — is required?</p> | <ul style="list-style-type: none"> Introduce hoshin to align the organization vertically and horizontally around strategic objectives. Establish a daily management system for the plant to track key metrics and rapidly identify and solve cross-functional problems. Reorganize engineering from a product orientation to a matrix organization to develop deep technical excellence. |
| <p>5 What basic thinking, including mindsets and assumptions, are required by the organization as a purpose-driven socio-technical system?</p> | <ul style="list-style-type: none"> Switch thinking and action from firefighting to root-cause problem-solving. Make the transition from salaried management telling hourly workers what to do toward solving problems together. Change focus from "fix everything" to prioritizing problems that affect safety, quality, delivery, and overall cost. Refocus from trying to make everything perfect to working to become a little bit better today than yesterday. |

COMPANY

GE Appliances, a Haier Company

Proven Results

- Increased production schedule achievement from 31.8% to 90%, which represented over \$20 million in annual revenue.
- Reduced foam-injection machine's cycle time by 26% with zero capital expenditure.

Learning Experiences Beyond CLP Coaching

- Joined an LEI-sponsored Executive Learning Tour to Japan
- Hosted two kaizen activities to develop kaizen capability
- Participated in semi-annual Lean Product and Process Development (LPPD) Learning Group meetings, 2015 to present
- Hosted an LEI-sponsored Co-Learning Partner meeting 2017



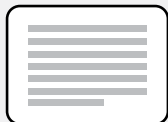
GE APPLIANCES
a Haier company

"The reason we were able to outperform competitors during the Covid-19 crisis was because of the strength of our lean enterprise."

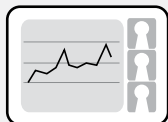
— Kevin Nolan
CEO

GE Appliances, a Haier Company

Learn More About GE Appliance's Lean Transformation Experience



Read the Article:
Emerging Stronger



Listen to the Lean Summit Presentation:
Transforming GE Appliances

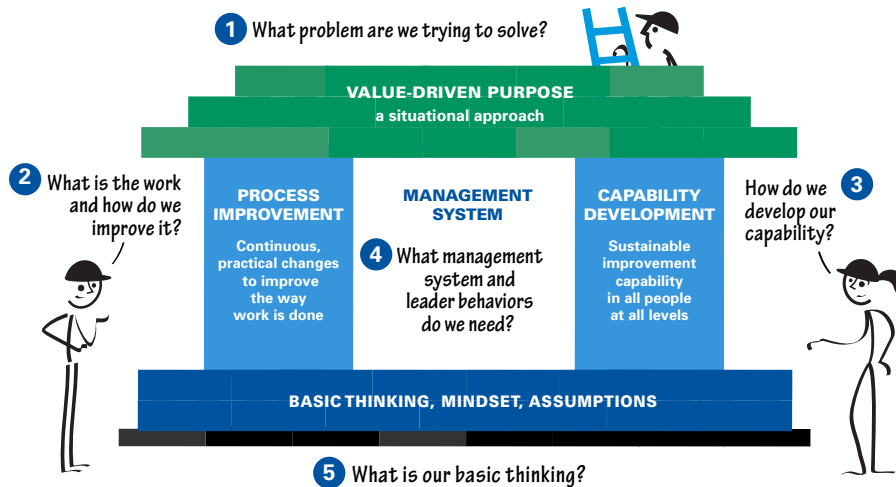


Watch the Video:
Develop Leaders' Capability by Immersing Them in the Work





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To learn more about the LTF, [watch the video](#).

How TechnipFMC Responded to the 5 Fundamental LTF Questions

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| 1 What is the value-driven purpose? Or what is the problem to solve? | <ul style="list-style-type: none">■ Reduce subsea system's weight and size by 50% and part count by 30% to remain profitable in the volatile oil industry. |
| 2 What is the work to be done (to solve the problem)? | <ul style="list-style-type: none">■ Use a concept paper to clarify the product vision and align all functions around it.■ Use set-based concurrent engineering to test alternatives rapidly, close knowledge gaps, and identify the best solution early in the product development process.■ Use trade-off curves to capture critical knowledge and make decisions around complex technical relationships. |
| 3 What capabilities are required (to do the work to solve the problem)? | <ul style="list-style-type: none">■ Establish primary chief engineer and subsystem chief engineers responsible for designing the product's entire value stream. |
| 4 What management system — operating system and leadership behaviors — is required? | <ul style="list-style-type: none">■ Create an obeya to ensure alignment and rapid problem resolution throughout the product development process.■ Use design reviews to quickly resolve technical issues, provide help to engineers rapidly, ensure successful system integration, and develop engineers. |
| 5 What basic thinking, including mindsets and assumptions, are required by the organization as a purpose-driven socio-technical system? | <ul style="list-style-type: none">■ Change focus from designing a product to designing a value stream.■ Stop hiding problems and start exposing problems. |

COMPANY

TechnipFMC

Proven Results

- Redesigned Subsea 2.0 oil and gas system with 33% fewer parts, 50% less weight, and 50% less size than the previous generation
- Reduced lead time on future orders by 33%
- Attained cost and development time targets on Subsea 2.0

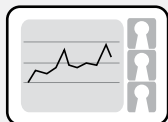
Learning Experiences Beyond CLP Coaching

- Participated in semi-annual Lean Product and Process Development (LPPD) Learning Group meetings, 2016 to present
- Hosted an LEI-sponsored LPPD Learning Group meeting in 2016
- Visited MillerKnoll to learn from its engineering team
- Attended two Designing the Future Summits, 2018 and 2019, and three Lean Summits, 2017 through 2019
- Joined an LEI-sponsored Executive Learning Tour to Japan

Learn More About TechnipFMC's Lean Transformation Experience



Read the Case Study:
LPPD Under the Sea:
Efficient Product Design
with Subsea 2.0



**Listen to the Lean
Summit Presentation:**
Innovating in Historically
Tough Times



Watch the Video:
Designing the
Value Stream



"We realized the full potential of our product when we redesigned the value stream addressing engineering, manufacturing, supply chain, and services. "

— Paulo Couto
Senior Vice President of Engineering
TechnipFMC

