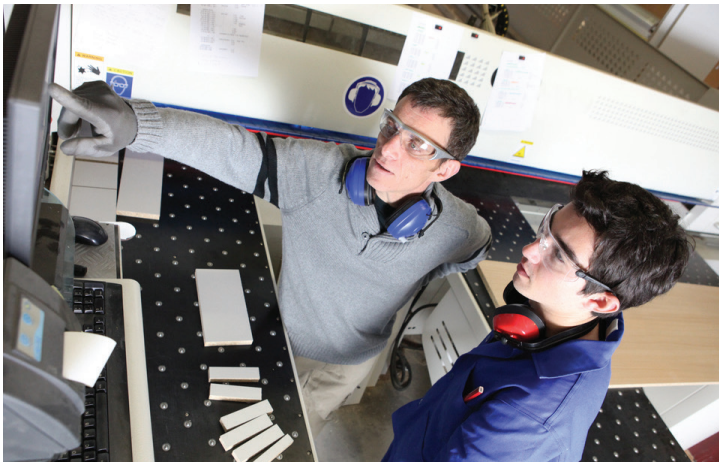

Lean Leader Workshop Series

This series of classes teaches not only the tools of lean, but also offers proven leadership techniques for implementing lean in you organization, managing culture change, and developing continuous improvement engagement throughout your workforce.

What is Lean?

Lean is a systematic approach to eliminating waste and creating flow within an organization to improve overall customer value. The foundation for success with lean is a problem-solving culture, based on coordinated process improvement and people development. Leaders from manufacturing, to service industries, to medical organizations have benefited from the techniques pioneered by Toyota.

This training will assist companies in saving time, money, and precious resources through creating the most efficient team possible. Benefits of implementing these techniques include coaching and developing team members who actively pursue improvement in safety, quality, productivity, and intentional employee engagement.

Following are some highlights about the workshops:

- The courses can be taken individually or as a workshop series.
- The workshop topics progress from Lean Basics to Advanced Lean/Culture-Change, and are aligned with the learning plan for the SME Lean Bronze certification program.
- Each class is interactive and allows attendees to ask questions about particular situations they may encounter in their work environment.
- Our Instructors' approach pulls from many years of experience in the field and gives attendees in-depth knowledge relevant to their industry.
- The registration deadline is 2-weeks before each class.

For more information, contact your local Solutions Consultant today.

Lean Introduction: Manufacturing and Office Processes

During the Lean Introduction you will learn a systematic approach to reducing costs and lead times by continually reducing non-value added activities. Lean tools improve the flow of information and materials that will increase your organization's productivity, competitiveness, and profitability. In addition to learning how to apply the tools to manufacturing processes, you will learn how to turn your office and support areas into efficient, effective, predictable operations. With a combination of classroom training, real-world examples, and hands-on simulations, you will discover ways to identify and eliminate or reduce the wastes in your process.

Value Stream Mapping and Creating flow and Pull Systems (including Kanban)

Value stream mapping and creating flow focuses your improvement efforts and pinpoints problem solutions that will give you the most value for your money, time, and energy. Value stream mapping lets you create a material and information flow map of a product family. A typical value stream includes customer orders entering the production control schedule, raw materials entering the facility, manufacturing processes, and finished goods leaving the shipping dock. You will learn about:

- Product/service family matrix
- Current state mapping
- Future state mapping
- Developing an action/kaizen plan

Creating Flow - One of the goals of Lean is to maximize flow through the value stream. While one piece-flow is ideal, reduced batch size can also result in a major improvements in process flow. You will learn techniques for:

- Combining activities
- Continuous flow processing with multiple roles
- Concurrent processing
- Designing flow systems

Pull systems are a method for controlling the flow of resources in a process based on the actual customer demand or consumption. Pull systems rely heavily on kanbans, or signals, to establish and maintain this flow of resources. You will learn:

- The three types of pull systems
- Methods to determine and control queues
- Types of kanbans and their use
- Techniques for leveling the pull system

5S/Workplace Organization and Standardized Work and Mistake-Proofing

5S is an organizational technique that helps you streamline your workplace. By using this systematic method, you can create a safer, cleaner, and more organized arrangement of the workplace with a specific location for everything. You will learn to eliminate items that are not needed, and you will see lasting productivity improvements from these simple techniques.

Visual management is a methodology to make key process data and answers to questions visible in the workplace. You will learn about:

- Identifying meaningful metrics
- The six elements of visual management
- Road blocks to visual management

Standardized work is a tool for developing, confirming and improving processes. It defines the

desired sequence of steps, the time to perform the steps and other elements to ensure that an activity is performed in a consistent way over time. You will learn about:

- Takt time
- Work sequence
- Time measurement
- Standard work-in-process (SWIP)

The Mistake-Proofing training gives you methods for increasing the visibility of errors, improving reaction time to errors, and creating systems to prevent errors from recurring. You will learn about:

- Quality at the source
- Types of inspection
- Quick feedback and reaction
- Mistake proofing devices (Poka-Yoke)

Quick Change-over and Total Productive Maintenance (TPM)

Quick Change-over Training will help you reduce the time you lose to setups and changeovers while increasing the valuable available time of your production equipment. Based on the principles of the single minute exchange of dies (SMED) system developed by Shigeo Shingo, this event uses classroom training and simulations to demonstrate methods for:

- Saving time and money
- Increasing production flexibility
- Creating additional manufacturing capacity

Total Productive Maintenance (TPM) focuses on getting managers, maintenance personnel and equipment users all working together to prevent equipment problems and reduce expenditures. By giving ownership and responsibility of equipment and processes to the right employees, equipment breakdowns are reduced improving your production equipment's availability, performance, quality, reliability, and safety. You will learn about:

- Six big losses from equipment-related wastes
- Shared responsibilities in autonomous maintenance
- TPM Metrics—OEE, MTBF, MTTR
- TPM communication tools

A3 Structured Problem Solving

The A3 is an objective, pencil and paper tool designed to solve small specific problems. It defines the current condition and looks at the root cause of the issue. The A3 also guides the user to define clear steps to implement changes and builds accountability. All work done on A3s is validated with the staff and encourages communication between workers and departments. A3s are a simple and effective way to truly understand the way work happens now and how it can be redesigned effectively. You will learn:

- Defining the problem
- Establishing improvement targets
- Analyzing information related to the problem
- (Developing and implementing solutions (countermeasures)
- Checking results

Kaizen Facilitator

Kaizen Facilitator - Kaizen events are the vehicle to implementing Lean tools and concepts. Kaizen events are well-scoped, focused improvement efforts

that utilize a team-based approach to eliminating wastes. This course is designed to teach a standard Kaizen process that can be used for implementing any Lean tool, such as quick changeover, 5S, cellular/ layout, and TPM. Objectives and topics include:

- Overview of Kaizen
- Preparation for a Kaizen event
- Standard process for a 3 to 5 day Kaizen event
- Forms, templates and tools for quickly collecting and analyzing data
- Preparation of a final report for management
- Estimate of the impact of the event

TWI - JI/ JR/ JM

Training Within Industry (TWI) consists of three separate programs for supervisors/team-leaders/ job-trainers: Job Relations, Job Instruction and Job Methods.

- Job Relations is designed to help shift the culture towards continuous improvement and to help supervisors deal with the people problems encountered with the change in culture. This program is designed as a tool to help Supervisors develop Leadership skills.
- Job Instruction training teaches Supervisors how to instruct the people doing the jobs. This training includes explaining to workers why their jobs are important, breaking down the job into logical steps and key points and teaching the correct method of performing a task on their own and following up to insure standard work is enforced.
- Job Methods wraps up your continuous improvement program by building on the skills of the operators and the first line leaders (team leaders, supervisors, cell leaders). This program will enhance most team based continuous improvement programs by delivering a high volume of small incremental improvements from individuals.

Kata: Building Lean Culture to Sustain and Thrive

Toyota Kata addresses this challenge of sustaining your improvements and culture change by providing the framework for a sustainable problem solving culture incorporating targeted experimentation and personal learning. In this practical workshop you will learn about two specific behavior routines:

Improvement Kata - is a repeating routine of establishing challenging target conditions, working iteratively through obstacles and learning from problems encountered along the way. The improvement Kata is a scientific 4-step iterative routine that addresses only those obstacles that lie on the path of a trajectory that leads to the achievement of short term Target Conditions that are in line with a long term Vision/Challenge.

Coaching Kata - is a pattern of teaching the Improvement Kata to employees at every level, ensuring that it permeates their thinking and actions. The Coaching Kata is a daily routine that utilizes five questions to help teach the Improvement Kata thinking pattern and ensure that it is embedded within an organization via team accountability. The Improvement Kata & Coaching Kata turn scientific thinking into a practical skill anyone can learn, by combining a four-step scientific working pattern with techniques of deliberate practice.