Lean Process Improvement

Course outline

Provided by: Performance Management Consultants – PMC Training

Reference no.	183-27
Duration	2.00 day(s)	12:00 hours [1]
Website link	https://pmctraining.com/training/lean-process-improvement/

Lean Thinking Tools to Create a More Sustainable Enterprise

Lean principles have come a long way over the past 300 years. From Benjamin Franklin's early ideas, to Henry Ford's work in the 1920's and the Toyoda precepts in the 1930's, to Jeffery Liker's publication of The Toyota Way in 2004, Lean processes have evolved from a simple concept to a set of widely used best practices.

This two-day course will give participants the foundation to begin implementing Lean process improvement tools in their workplace. The first day will explore the foundations of Lean through the Toyota precepts and the five critical improvement concepts (value, waste, variation, complexity, and continuous improvement). The second day will give participants tools to perform continuous improvement in their organization, including 5S, 5W-2H, PDSA, DMAIC, Kaizen, Genchi Genbutsu, and various Lean data mapping methods.

Learning outcomes

At the end of this workshop, you will be able to:

- Define Lean and its key terms
- Describe the Toyota Production System and the TPS house
- Describe the five critical improvement concepts
- Use the Kano model to understand, describe, analyze, and improve value
- Identify and reduce various types of waste
- Create a plan for a more environmentally Lean organization
- Use the PDSA and R-DMAIC-S models to plan, execute, and evaluate Lean changes
- Use Lean thinking frameworks, including 5W-2H, Genchi Genbutsu and Gemba
- Prepare for and complete a basic 5-S
- Describe the key elements of Kaizen events, particularly a Kaizen blitz
- Gather, analyze, and interpret data using flow charts, Ishikawa (fishbone) diagrams, SIPOC diagrams, and value stream maps
- Go back to their organization with a plan to begin incorporating Lean into their corporate culture

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[1] *The course hours reflect teaching time that often correlate with continuing education credits (CEC) or professional development units (PDU). Please check with your profession's governing body, as there is no universal approach.*

Workshop topics

Course Overview

You will spend the first part of the day getting to know participants and discussing what will take place during the workshop. Students will also have an opportunity to identify their personal learning objectives.

Understanding Lean

To start, participants will learn what Lean is and what its origins are. Participants will also learn about the Toyoda Precepts, how Lean differs from Six Sigma, and some common Lean terms.

The Toyota Production System

Next, participants will learn about the Toyota Production System as presented by Jeffery Liker.

The Toyota Production System House

In this session, participants will learn about another representation of the Toyota Production System.

The Five Critical Improvement Concepts

Then, you will discuss five key ideas supporting Lean process improvement: value, waste, variation, complexity, and continuous improvement.

Understanding Value with the Kano Model

This session will explore value with the Kano model, which divides product or system characteristics into three groups: basic, performance, and value added.

Types of Waste

In this session, participants will learn about the three main wastes (muda, muri, and mura) as well as some new types.

Creating a Lean Enterprise

Next, participants will explore some ways to create an environmentally friendly organization with Lean. They will also learn about John Bicheno's 20 keys to a Lean organization.

The Plan, Do, Study, Act (PDSA) Cycle

The first session of Day Two will cover the PDSA cycle, which should be used to plan and implement organizational changes.

Using the R-DMAIC-S Model

This session will cover the Recognize – Define – Measure – Analyze – Improve – Control – Sustain model, an advanced version of PDSA primarily used in Six Sigma.

Lean Thinking Tools

Next, participants will learn about some Lean thinking tools, including 5W-2H, Genchi Genbutsu, Gemba, and 5-S.

Kaizen Events

This session will cover the five levels of Kaizen events, with a focus on Level 3 (the Kaizen blitz).

Data Gathering and Mapping

Most of the second afternoon will be spent learning about and practicing various Lean data tools, including flow charts, Ishikawa (cause and effect or fishbone) diagrams, SIPOC charts, and value stream maps. We will also share some tips for effective data analysis.

A Plan to Take Home

The final session will challenge participants to think about roadblocks and pitfalls to Lean implementation and how to bring those lessons to their organization. Participants will also be given some ideas for Lean projects and a framework for a successful Lean approach.

Workshop Wrap-Up

At the end of the course, students will have an opportunity to ask questions and fill out an action plan.

Prerequisites

There are no prerequisites for this course.

Who should attend this course?

Leaders who wish to learn the foundations to begin implementing Lean process improvement tools in their workplace.