



Lean Thinking

For ACES members only

**Computer Based
e-Learning
Course**

Overview

Lean is simply about creating more value for customers by eliminating activities that are considered waste. Any activity or process that consumes resources, adds cost or time without creating value becomes a target for elimination.

On completion of this course the student will have a good understanding of what Lean is, why it is used, the benefits of becoming a Lean organisation and how to implement Lean effectively. They will also gain a clear understanding of all the Lean concepts, principles and techniques.

This course is relevant for any industry whether service or product related. It is also very relevant to the public and healthcare sectors.

The Course

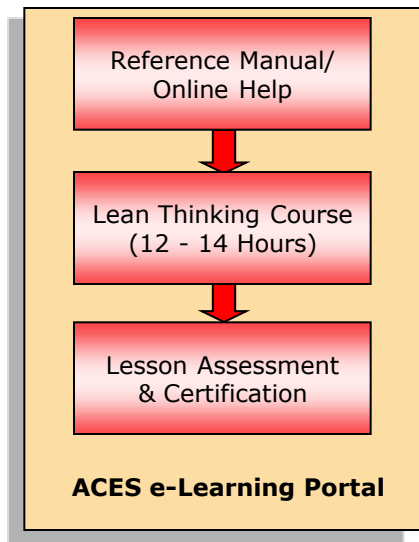
This Lean course incorporates interactive learning methods including typing questions, drag & drop exercises, multiple choice and hotspot questions throughout.

Audio, illustration & animation is used to help describe the theories behind Lean Thinking and the implementation of all techniques.

Simple step by step progress through the course enables easier understanding of more complicated areas.

With an in-built test, students are provided with proof of education & knowledge gained.

Course Structure



Target Audience

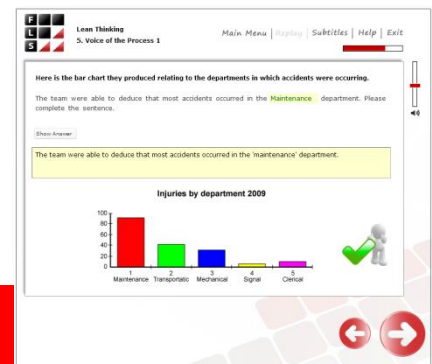
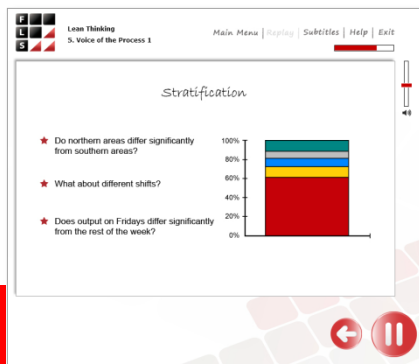
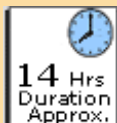
Using examples from many different industries this product is appropriate for individuals whose task is to create an environment that fosters & sustains Lean changes in their organisation.

The typical audience could be:

- Senior Managers
- Operational Leaders
- Value Stream Managers
- Lean Team Members
- Financial Managers
- Administrative Staff
- Trainers

Benefits of e-Learning

- The training can be delivered at any time & at any location that is required.
- The training is easily integrated with existing educational programmes & work experience.
- The modules offer an ongoing source of reference and refresher training.
- With question & answer sections, case studies & a test zone, knowledge gained is easily measured.





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Module Listing

Introduction	Setting Expectations; The Red Beads Experiment; Principles Under Pinning Lean; What is Lean Thinking; System for Process Improvement; Overview of the Tools & Methodology.
Voice of the Customer	Scoping the Project; Understanding Customer Requirements; Who are my Customers; Customer Demand; Matrix Diagrams; Kano Model; Improvement Statements; Process Measures; Operational Definitions.
Voice of the People	SIPOC; Process Maps & Flowcharts; Deployed Flowcharts; Value Stream Mapping; 7+1 Wastes; Spaghetti Diagrams; Brainstorming; Cause & Effect Analysis; Root Cause Analysis; Is/Is Not Matrices.
Variation	Time Series Data Presentation; What is Variation; Common & Special Causes; The Two Mistakes; Tampering with a Process.
Voice of the Process 1	Process Measurement; What Data to Collect & Why; Data Collection Sheets; Stratification; Pareto Charts.
Voice of the Process 2	Scattergrams; Run Charts; Dot Plots & Histograms; Watch out for Traps.
Voice of the Process 3	Centre & Spread of Process Data; Process Behaviour Charts; Common Cause Strategies; Special Cause Strategies.
Voice of the Process 4	What the Control Limits are; Control Charts for Individual Values; Control Charts for Sub-Groups; Guidelines for Calculating the Limits.

For further information please contact:

Australian Cost Engineering Society

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Lean Thinking
5. Voice of the Process 1

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What are the causes of callers to our telephone enquiry service waiting too long?

- Possible call rushes at various times of the day.
- How many times different types of query are received.
- Which types of query cause the operators difficulty.
- The cost of answering different types of query.
- The ratio of time operators spend answering calls to sitting spare.

Check

Feedback
That's correct. The first three address causes of problems. The final two address costs and efficiency. In general, cost and efficiency data is not helpful in process improvement.

Lean Thinking
2. Voice of the customer

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The Kano Model

Delight

OK

Disappointed

Fall Short

Hot

Excited

DELIGHT (customer)

NO DELIGHT (customer)

FEELS TO BETTER

BASIC (customer expected)

Lean Thinking
7. Voice of the Process 3

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Detecting Special Causes
How to Interpret Control Charts

Process Data

Time Series Data

Upper Control Limit

Mean

Lower Control Limit

There are some rules to detect special causes or 'out of control conditions' in a Control Chart.
The most obvious is a point falling above the upper control limit, or below the lower control limit.