

Catalyst's British Quality Foundation Lean Practitioner Programme

Overview

This three-day programme is a highly participative course which introduces the key principles, concepts and benefits of Lean Thinking, including a brief introduction to the importance of the 'softer skills' needed for successful projects and continuous improvement.

The broad aim is to provide participants with an increased knowledge of the Lean tool-kit and an awareness of the importance of Change Management techniques to ensure successful change. Following the programme, they should be able to demonstrate their active use of appropriate Lean concepts, tools and techniques including, for example, the introduction of 5S and Visual Management into a work area, the elimination of waste to improve flow, and facilitation of Kaizen Rapid Improvement Events.

Ideally, the participants should attend with an identified process problem or project to tackle. Where appropriate, the practical syndicate exercises will look to work on these issues.

Content

The programme also seeks to enable the participants to apply for Lean Practitioner certification through the British Quality Foundation and the framework of the course has been specifically designed for this purpose:

Understanding the Principles and Concepts

- **The importance of Customers (Suppliers and Stakeholders), including:**
 - Developing Critical to Quality Customer Requirements (CTQs)
 - Determining the relevant process measures
 - Identifying Customer Value and the Moments of Truth
 - Use of the Kano model

- **How the work gets done and how well, including:**
 - Standard Operating Procedures (standard work)
 - Understanding how the processes flow
 - Creating Process and Value Stream maps, as appropriate
 - Creating Spaghetti diagrams
 - Identifying Value-Add and Non-Value-Add activity
 - Data collection and display
 - Understanding variation and the use of Control Charts
 - Developing Visual Management

- **Optimising process flow, including:**
 - Stabilising the process
 - Reducing/removing Non-Value Add activity
 - Identifying and reducing waste including the introduction and deployment of 5S and 'Waste Walks'
 - Understanding waste from the customer's perspective
 - Demonstrating the use of the Theory of Constraints in addressing bottle-necks
 - Levelling and sequencing production (Heijunka)
 - Identifying opportunities for Just in Time and Kanban (Pull production/Single piece flow)
 - Identifying the opportunity for enhanced workplace layout

- **Understanding the importance of team working, including:**
 - The team roles required to deliver a Lean environment
 - Communication
 - Team briefings
 - Ensuring the use of up to date Visual Management

- **Participating in and leading improvement activity, using a systematic method, including:**
 - Identifying, prioritising and scoping improvement projects
 - Following DMAIC (Define, Measure, Analyse, Improve and Control) or PDCA (Plan, Do, Check, and Act), as appropriate
 - Planning and facilitating Kaizen Rapid Improvement Events
 - Assessing and managing risk
 - Developing and maintaining Storyboards/A3s
 - Understanding $E = Q \times A$, ensuring effective 'buy-in'
 - Ensuring effective Control Plans

A comprehensive range of Lean Thinking tools and techniques are covered in varying degrees of detail – see Appendix.

The supporting materials include a wiro-bound copy of the slides, the 'Go Lean' book and complementary pocket guide.

Appendix - Lean Thinking Tools and Techniques

5 Whys	Pareto
5S	PDCA
Brainstorming	Problem and Goal Statements
Cellular Manufacturing	Problem Solving/Counter Measures
Change Management	Process Mapping
Control Charts	Process Stability
Control Plan	Process Stapling
CTQs	Priority Based Matrix
Data Collection	Product Families
DMAIC	Pull versus Push
Elements of Change ($E = Q \times A$)	Quick Changeover (SMED)
Error Proofing	Risk Assessment
Facilitation Skills	Root Cause Analysis
Fishbone	Seven Wastes (Tim Wood)
FMEA	Short Interval Control
Heijunka	Single Piece Flow
Improvement Charter	SIPOC
In Frame out of Frame	Solution Prioritisation Techniques
Is/Is Not	Spaghetti Diagrams
Jidoka	Stakeholder Analysis
Just in Time	Standard Work
Kaizen	Storyboards and/or A3 Reporting
Kanban	Supermarket FIFO
Kano	Takt Time
Line Balancing (Yamazumi)	Theory of Constraints - Bottlenecks
Moments of Truth	Total Productive Maintenance
Muda	Toyota Way
Mura	Value Stream Mapping
Muri	Visual Management
N/3	Waste Walks
Overall Process or Equipment Effectiveness	XY Grid/Boston Box
Paired Comparisons	