

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

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| 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 x A) | Quick Changeover (SMED) |
| Error Proofing | Risk Assessment |
| Facilitation Skills | Root Cause Analysis |
| Fishbone | Seven Wastes (Tim Wood) |
| FMEA | Short Interval Control |
| Heijunka | Singe 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 | |