

# Lean Six Sigma Team Training Workshop

## Introduction

Lean Six Sigma team training workshop is focused on understanding and applying the **Define Measure Analyse Improve and Control** model which is the foundation of all Lean Six Sigma projects. The approach we take is to use training workshops that are a mixture of theory, work on generic exercises and work on organisation specific projects. The result is that the organisation has trained a group of people and delivered up to 3 Six Sigma projects over the course of approximately six months. This programme equates to a comprehensive Lean Six Sigma Green Belt training course backed up with practical experience.

The focus of Six Sigma is fundamentally about quality, customer focus and cost, where as Lean is about cost, value and speed. This course blends a number of Lean concepts and tools into the Six Sigma DMAIC model. The team leaders and team members are the brains and muscle behind the Lean Six Sigma programme it is critical that they are equipped with the appropriate skills and tools to enable them to deliver current and future improvements

## Objectives

At the end of the programme of team training students will understand and be able to:

- > Apply the principles of the Six Sigma DMAIC performance improvement model.
- > Establish the “Voice of the Customer” in defining the required performance standard.
- > Use a number of measurement approaches and tools to establish current performance.
- > Use appropriately a number of basic analysis tools and techniques to establish the root cause of a problem.
- > Understand key lean concepts and tools, and when and how to apply them to drive improvements
- > Recognise the difference in approach and techniques for incremental and redesign improvement strategies and know how to decide on the correct approach.
- > Establish ongoing process controls and process governance structures.

Students will also have gained significant real experience in applying Six Sigma tools and techniques by undertaking and completing a Six Sigma project. They will then be well prepared to take on new Six Sigma improvement projects. The financial benefit from undertaking and delivering up to 3 Six Sigma improvement projects will typically be £100k/annum. In addition the students have the potential to make savings on other Six Sigma projects.

## Prerequisites

All of the students need to be assigned to an appropriate Six Sigma project prior to the course commencing. The selected project needs to comply with the following criteria:

- > There is a gap between current and desired performance.
- > The cause of the problem isn't clearly understood.
- > The solution to the problem isn't defined or apparent.

Project Sponsor or Champion will have been identified. They will be required to provide initial problem statements and project goals. Ideally, the Project Sponsor or Champion will be available for project reviews at the commencement of the Measure, Analysis, Improve and Control training workshops. The delegates will also have to devote on average 20% of their time to project work in between the training workshops.



# BUSINESS TRANSFORMATION (TRAINING AND COACHING)

## Course Structure and Content continued

DMAIC Element	Training Workshop Duration	Training Workshop Timing	Course Content	Inter-course Project Activity
<b>Measure</b>	2 days	4 to 6 weeks after <b>Define</b> Training Workshop	<ul style="list-style-type: none"> <li>?? Project review</li> <li>?? Types of measurement.</li> <li>?? Measurement process</li> <li>?? Measurement definition.</li> <li>?? Selecting measures <ul style="list-style-type: none"> <li>?? Value</li> <li>?? Cost of poor quality</li> </ul> </li> <li>?? Collecting measurements</li> <li>?? Data stratification</li> <li>?? Sampling</li> <li>?? Measuring yields and capability</li> <li>?? Data collection plan</li> <li>?? Inter-course objectives</li> </ul>	Finalise and verify measurement definitions and data collection plan. Collect data.
<b>Analyse</b>	2 days	6 to 8 weeks after <b>Measure</b> Training Workshop	<ul style="list-style-type: none"> <li>?? Project review</li> <li>?? Baseline Sigma Calculation</li> <li>?? Logical and Data Analysis <ul style="list-style-type: none"> <li>?? Pareto, Frequency and Correlation Analysis</li> </ul> </li> <li>?? Run charts/time series</li> <li>?? Detailed process mapping and analysis</li> <li>?? Problem identification</li> <li>?? Value Stream Analysis</li> <li>?? Cause and effect analysis</li> <li>?? Root cause analysis</li> <li>?? Design of experiments</li> <li>?? Inter-course objectives</li> </ul>	Complete and verify analysis. Verify root cause hypothesis.
<b>Improve</b>	3 days	6 to 8 weeks after <b>Analyse</b> Training Workshop	<ul style="list-style-type: none"> <li>?? Project review</li> <li>?? Brainstorming solutions</li> <li>?? Lean principles</li> <li>?? Clarifying and selecting potential solutions</li> <li>?? Solution definition</li> <li>?? Evaluating and verifying solutions.</li> <li>?? Pilot testing</li> <li>?? Implementation planning — <ul style="list-style-type: none"> <li>force field analysis</li> </ul> </li> <li>?? FMEA risk analysis</li> <li>?? Selecting and running pilots</li> <li>?? Change Management</li> <li>?? Measuring Results</li> </ul>	Formulate and verify solution, define implementation plan. Small scale pilot of solution, measure results and identify issues.
<b>Control</b>	1 day	4 to 6 weeks after <b>Improve</b> Training Workshop	<ul style="list-style-type: none"> <li>?? Project review</li> <li>?? Mistake proofing</li> <li>?? Statistical Process Control</li> <li>?? Process Scorecard</li> <li>?? Response plan</li> <li>?? Process Ownership</li> <li>?? Closed-loop Management</li> <li>?? Project close and handover</li> </ul>	Complete solution documentation, establish process controls and handover to Process Owner. <b>Celebrate Success</b>