

Lean Six Sigma Practitioner Green Belt

Introduction

Lean and Six Sigma, both proven business improvement approaches, provide businesses with the ability to maximise customer, employee and shareholder value by minimising process variation and waste. This modular twelve day course provides delegates with a broad range of tools and techniques to become a certified practitioner and participate in or lead improvement projects. It provides a hands-on learning experience for delegates to develop both the technical knowledge and personal skills to deliver quantitative and qualitative process analysis. The course uses a blend of statistical analysis and practical exercises that builds confidence in the use of statistical tools. Minitab software is introduced and delegates will become competent in the use of statistical process analysis tools which aid data analysis and reporting.

Objectives

This modular twelve day course (2, 3, 3, 2 and 2 days) will enable delegates to:

- Be self sufficient process improvement practitioners that have the capability to analyse business improvement opportunities and deliver business solutions
- Understand the activities, tools and techniques of the DMAIC improvement model
- Identify stakeholders, analyse their requirements and motivations, manage the relationship and change process.
- Use Minitab and Excel to analyse the cause and effect of business defects and process variation
- Identify, quantify and select the most suitable solutions
- Apply a range of statistical process control approaches to improve the ongoing management and improvement of processes

Course Content

- Introduction to Lean Six Sigma
- Roles and responsibilities

Define

- Project Charter
- Stakeholder analysis, communication and change management
- Voice of the customer
- Process flow charts and SIPOC
- Goal deployment
- Failure and value demand
- Project management, tracking & review
- Change management

Measure

- Measurement overview and data types
- Descriptive statistics
- Introduction to Minitab
- Rational sub-grouping
- Data collection techniques
- MSA methods in Minitab
- Sampling theory and plan
- Base-lining (continuous and discrete)
- Identifying measures, yield & lean metrics
- Current state value stream mapping
- Failure modes & effects analysis (FMEA)

Analyse

- Inferential statistics
- Confidence intervals
- Run charts and graphical analysis
- Hypothesis testing theory and Minitab
- Analysis of variance (ANOVA)
- Value add and value stream analysis
- Waste analysis
- Process and gap analysis

Improve

- Future value stream mapping
- 5S analysis
- Creative thinking
- Response surface experiments
- Solution selection, piloting and implementation planning
- Stakeholder analysis; training plans

Control

- Control overview and planning
- Standardisation and Visual Management
- Control chart theory
- Advanced control charts
- Response charts
- Benefit validation
- Transfer and replication
- Project closure
- Transition and audit

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Who should attend?

All staff expected to lead or take part in improvement projects. This will be a part –time, but not insignificant, activity for their role.

Delegate improvement projects

Delegates ideally should come to the training course with a project identified to undertake post-training. Advice and support can be provided on project identification and selection. Project delivery is not compulsory; however the lack of a project may slow the ongoing development of delegates towards certified green belt status. Coaching assistance can also be provided on projects post completion of the training programme.

Follow on courses

Lean Six Sigma Black Belt Conversion course (LSS107)

Further information

Please contact Denis Mahoney at Business Transformation (Training and Coaching) on 07766 333294 or be email at denis.mahoney@business-transform.co.uk.