Lean Six Sigma Foundation Green Belt Programme

INTRODUCTION

- This Lean Six Sigma Green Belt Foundation course provides delegates with an understanding of key Lean Six Sigma concepts and techniques, and the ability to apply these concepts and techniques to real business issues.
- Six Sigma is probably the most popular and widely used approach to operations business improvement today. Today, many companies are demonstrating major improvements in efficiency and customer service as a direct result of applying Six Sigma.
- A Six Sigma project seeks to identify and remove the causes of defects and errors in business processes. To achieve this, the approach follows an internationally accepted standard methodology using a set of tools, including statistical methods, while creating an infrastructure within the organization to exploit opportunities involving all employees in the improvement process.
- While Six Sigma and Lean both seek to achieve process improvement, they have a different emphasis. Lean focuses on reducing waste; Six Sigma focuses on reducing variation. Lean Six Sigma integrates these two approaches.
- Companies pursuing a Six Sigma strategy usually insist that managers, supervisors and team leaders engage in continuous improvement activity and, to give them the insights and skills to achieve this, they generally train to become Green Belts.
- Apart from the limited numbers of Master Black Belts (top level company experts), the top level Six Sigma practitioners are Black Belts; these may typically work full-time on improvement activities. While Black Belts take responsibility for leading a Six Sigma project, they are usually supported by a number of Green Belts; the actual number will depend on the size of the organisation and its aspirations.
- A Green Belt is expected to deliver the agreed benefits of a Six Sigma project to the organisation. These improvement activities will often be within the Green Belt's usual field of employment and operation.

Green Belts

- Work with local line management to identify and quantify opportunities for improvement within the local environment
- May work under the direction of a Black Belt or Master Black Belt
- May coach process operators (Yellow Belts) on process improvement methods and activities
- This training course is fully consistent with ISO 18404:2015, the internationally accepted standard outlining competencies for key personnel and their organizations in relation to Six Sigma and Lean implementation.

This training seminar will highlight:

- The DMAIC process improvement methodology (Define, Measure, Analyse, Improve, Control)
- Statistical measurement and analysis techniques
- The application of Lean Six Sigma tools
- Root cause analysis

OBJECTIVES

- Define, design and execute DMAIC projects to solve business issues, and transition projects from phase to phase
- Apply lean concepts
- Use data collection and data analysis to improve decision-making
- Identify inefficiencies and problems, and pinpoint root causes
- Deliver agreed benefits to the business through the implementation of process improvement projects sponsored by senior management

TRAINING METHODOLOGY

- This training course will be highly interactive and participative, and will have a practical and applied focus. It features interactive lectures, group exercises, case studies, process simulations and individual exercises.
- Examples, case studies and practical exercises will be selected for relevance to the delegates' business and are based on the trainer's personal experience.

ORGANISATIONAL IMPACT

- The identification and quantification of opportunities for improvement within the local environment
- The ability to coach process operators (Yellow Belts) on process improvement methods and activities
- The development of in-house capability to lead Lean Six Sigma projects that produce bottom-line results
- The ability to lead teams through the process of change
- The sharing of process improvement learning and best practices within and beyond particular business functions

PERSONAL IMPACT

Benefits to delegates from attending this training course include:

- Enhanced analytical skills
- Ability to apply statistical data analysis techniques
- Improved project management skills
- Process improvement as an additional personal competence
- The ability to address a broad range of problems
- Increased personal value to the organisation

WHO SHOULD ATTEND?

This training course is suitable to a wide range of professionals but will greatly benefit: employees at any level who have an interest in improving the organisation. This can include:

- Managers, team leaders and supervisors who are expected to engage in their organisation's business transformation programme
- Employees who work in a business change department
- Senior Managers who may wish to participate in the occasional high level project and use their knowledge of Lean Six Sigma concepts, tools and techniques to improve their understanding of the business and improve their problem solving and decision making skills

Course Outline

Introduction

- What is Six Sigma?
- 5 Principles of Lean
- Lean Six Sigma Methodology
- Lean Concepts
- The Use of Tools to Complete the Define Phase of DMAIC, including:
- Creative Thinking
- Affinity Diagram
- Inter-relationship Diagram
- Voice of the Customer
- Stakeholder Management
- Project Charter

The Use of Tools to Complete the Measure Phase of DMAIC

- Measurement of Process Performance
- Price-Of-NonConformance (PONC)
- Control Charts

The Use of Tools to Complete the Analyse Phase of DMAIC

- Pareto Analysis
- 7 Wastes
- Cause-and-Effect Analysis
- Flow Chart / Process Map
- Value Stream Map
- Root Cause Analysis
- 5 Whys
- 5S Housekeeping

The Use of Tools to Complete the Improve Phase of DMAIC

- Mistake Proofing (Poka Yoke)
- Practical Problem Solving
- Brainstorming
- Ease vs. Impact Analysis
- PDCA (Plan-Do-Check-Act Deming cycle)
- Demonstrate New Process

The Use of Tools to Complete the Control Phase of DMAIC

- Control Charts for Ongoing Process Control
- Specify Ongoing Process Measurements
- Prepare DMAIC Project Documentation in Word
- Finalise DMAIC Project Documentation
- Leadership
- Basic Statistics
- Green Belt Roles and Responsibilities