



Green Belt Six Sigma Workshop

This four day Green Belt Certification Workshop provides participants a framework to the philosophy/principles of Six Sigma, examples from successful organizations and ways of getting started.

Workshop Overview:

This course includes a Six Sigma overview, examples of strategies, tools, measurements and controls used in successful planning and deployment. Learning is supported through utilization of experiential/team based assignments throughout the entire workshop.

Green Belts are a vital component to any successful Six Sigma program. Most organizations realize the need to develop Green Belts, who are the heart and soul (critical mass of people), necessary to achieve breakthrough level results from their Six Sigma initiatives.

In addition, this certification workshop focuses on concepts, methodology and tools often used in problem solving and planning, process mapping, data gathering, statistical analysis and implementing improvement initiatives. Includes:

- An understanding of a specific improvement/problem solving model
- The ability to use designated quantitative and qualitative improvement tools for improvement in service, cost, time and customer and employee satisfaction
- The ability to identify opportunities for improvement and establish performance measures in addition to establishing a data collection process
- An understanding of the principles of variation
- A working knowledge of process mapping and benefits of process improvement
- An understanding and ability to apply statistical tools (e.g. control charts) to business situations

Who should attend?

All levels of management and key front line associates who will be involved in the overall improvement efforts of the organization.

Participants will receive:

Six Sigma Green Belt Certification Manual (includes Six Sigma philosophy, definitions, DMAIC improvement model, Sigma measurement system, process mapping and background/construction information on quantitative and qualitative improvement tools.)

Workshop Benefits:

Upon completion of this course participants will be able to:

- Identify and define problems/issues clearly
- Standardize a system for measuring and prioritizing issues
- Analyze problems to determine the root cause(s)
- Understanding concepts of variation, common causes and special causes
- Use key Six Sigma problem solving tools
- Distinguish between attribute and variable data
- Understand control chart theory
- Develop a system for collecting data
- Understand and be able to implement the steps required for process mapping



Participants will learn:

- How companies like GE and Allied Signal use Six Sigma concepts to drive improvement and profits to new levels
- Five step improvement model
- Define and clarify what needs to be improved
- Data Gather and determine what to measure and how to gather data on our current performance
- Analyze the data and develop an improvement plan
- Implement an improved process and measure success
- Control the gains and continue the improvement

Workshop Agenda:

Day 1:

- Six Sigma Overview/Methodology
- Selection Matrix
- Problem Definition Checklist
- Brainstorming/Brainwriting
- Affinity Diagram
- Multivoting
- Cause & Effect Diagram
- Five Whys
- Check Sheet
- Pareto Chart
- Force Field Analysis

Day 2:

- Radar Chart (Spider Diagram)
- Measurement System Checklist
- Data Gathering Checklist
- Questionnaire Design
- Interrelationship Digraph
- Cost-Benefit Analysis
- Solution Window
- Solution Checklist
- Run Chart

Day 3:

- Process Mapping
- "As Is" Process
- Principles of Variation
- Tampering
- Control Chart Theory
- Attribute Control Charts (exercise)
- Variable Control Charts (exercise)
- Should be Process (exercise)
- Feedback & Close

Day 4:

- Additional Management Theories/Concepts
- Preparation for Green Belt Certification test
- Greenbelt certification test (100 multiple choice questions & 10 situational analysis exercises - 3 hour certification exam)

Steps to Six Sigma:

1. Identify your products and services (What do you do? What business are you in?).
2. Identify your customers, what they consider important and what you need to do to meet their requirements (Who do you serve? What standards must you and your suppliers meet? How do your customers define defects?).
3. Assess how well you are meeting customer needs: Identify and rank improvement opportunities (How well are you doing? Where do you most need improvement?).
4. Define, map and measure the process for doing work (current state).
5. Analyze data, remove non-valued activities and mistake-proof the process.
6. Improve continuously (measure, analyze, problem solve, check results and institutionalize).