Motorola Lean Six Sigma® Black Belt Training and Certification Program



MOTOROLA

亞卓國際顧問股份有限公司

AgiTek International Consulting.Inc.

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Program Participants

Managers, Project Leaders, Senior Engineers, Black Belt Candidates and anyone who desires an understanding of Lean Six Sigma principles and skills. No previous Six Sigma and Lean experience is required.

Program Overview

Motorola University's Lean Six Sigma training combines lectures with simulation exercises to give participants the opportunity to follow a structured improvement methodology. Using the DMAIC model, it teaches participants how to apply Lean principles and tools in conjunction with the Six Sigma rigor and methodology to achieve rapid and significant improvements with greater speed and reduced process variation. Participants will also learn how to play their role and effectively manage, support and motivate their teams and how to apply project management skills to achieve the desired goals.

Motorola University's approach to developing Lean Six Sigma experts is based on an Action Learning Model. This model combines classroom instruction with real-time project implementation and application coaching. Your journey to becoming a Lean Six Sigma expert will span four months, alternating between spending one week in training, and three weeks back on the job applying the tools and techniques you learned to complete your project.

Upon Completion, the Participant Will Be Able To:

- . Simultaneously improve both quality and speed by combining Lean with Six Sigma
- . Understand the Lean Six Sigma methodology and improvement processes
- . Properly define, scope and work on Lean Six Sigma projects
- . Gather Voice of the Customer and analyze survey data
- . Construct a Value Stream Map and apply the map to identify improvement opportunity
- . Learn to recognize waste
- . Apply Lean tools to analyze process flow and delay times and focus on the separation of "value-added" from "non-value-added" and work with tools to eliminate the root causes of non-value-added activities
- . Incorporate a comprehensive set of statistical analysis tools to problem solving
- . Provide a means for quantifying and eliminating the cost of complexity
- . Investigate basic queuing problems
- . Implement quick improvements using a structured Kaizen Event
- . Learn to mistake-proof a process to reduce rework
- . Apply SPC and visual process management to monitor the process
- . Use MINITAB 14 to enhance analysis for process improvement projects

Program Length:

20 days (5 days/week, 1 week/month)

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Certification

We offer the option of formal Black Belt certification. It requires that your Black Belt candidates complete training, pass

a test, lead and successfully complete one Black Belt project. Project will be assessed for business impact (financial

and/or "soft-dollar" impact) as well as Lean Six

Sigma skill demonstration.

Software

Participants need to bring a laptop computer preloaded with Microsoft Excel (Windows 98 or higher) and MINITAB®. They will receive Excel add-ins for additional statistical functionality.



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Program Content

Define Opportunity - What is important?	Measure Performance - How are we doing?
Identify and validate business improvement	Achieve an in-depth understanding of the process
opportunity	using value stream mapping
Document and analyze business processes	Determine what to measure
Define customer requirements	Develop effective data collection methods
Build and launch effective project teams	Understand and measure variation
	Evaluate measurement systems
	Determine process performance
Analyze Opportunity - What is wrong?	Improve Performance - What needs to be done?
Identify process constraints and bottlenecks	Develop potential solutions
Narrow down to the Potential Root Causes Confirm Root	Evaluate and select solutions
Cause to Output Relationship Estimate Impact of Root	Develop "To Be" Value Stream Map
Causes on Key Outputs and assess the impact of process	Develop and implement pilot run
complexity Prioritize Root Causes	Confirm attainment of project goals
	Develop full scale implementation plan

Control Performance - How do we guarantee performance?

Mistake-proof the process to elimnate defects from the process

Complete all documentation including SOPs, Process Control Plans, and Training Plans

Develop a monitoring system and implement SPC and Visual Process Controls to provide feedback

on the process

