€TRAINING

Lean Six Sigma Black Belt Training

29 April - 3 May 2024
London (UK)
Landmark Office Space

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REF: A1627 DATE: 29 April - 3 May 2024 Venue: London (UK) - Landmark Office Space Fee: 5300 Euro

Introduction:

Six Sigma is one of the world's most popular quality management methodologies, and this Lean Six Sigma Black Belt training course is specifically designed for individuals and organizations who are looking for an in-depth understanding of the widely-recognized Lean Six Sigma methodology.

Participants attending this course will gain a comprehensive understanding of disciplined, data-driven approach and process improvement techniques that eliminate defects in any process - from manufacturing to transactional and from product to service.

Course Objectives:

At the end of this conference the participants will be able to:

- Achieve significant improvements in critical business processes.
- Apply statistical and problem-solving tools to an improvement project brought to class on the first day.
- Reduce process variation.
- Eliminate waste and defects by applying lean and Six Sigma.
- Collect, analyze, and quantify data that enable process improvements.
- -Learn how to execute the Six Sigma methodology.
- Establish and define process capability.
- Identify and eliminate dominant process variation sources.
- Characterize and optimize processes by computing and applying statistical techniques.
- Design, simulate and execute designed experiments that depict validated improvement.
- Learn how to plan and implement process control to hold project gains.

Targeted Audience:

- This course is designed for individuals from diverse organizational functions operations, quality, logistics, finance, production, engineering, and other staff functions seeking to bring significant business results to their organizations. Participants are traditionally well versed in technical aspects of their jobs, are team leaders, and are effective project facilitators.

Course Outlines:

Unit 1:

- Overview and Foundation of Lean and Six Sigma
- Drivers and Metrics
- Projects
- Theory of Constraints
- Customer Data
- Project Planning Tools
- Project Documentation
- Basic Lean Six Sigma Metrics
- Team Dynamics and Performance

- Overview of Measure
- Introduction to Minitab
- Process Mapping
- Cause and Effect Analysis
- FMEA
- Probability and Statistics
- Measurement Systems Analysis
- Data Collection and Summary
- Process Capability

Unit 2:

- Analyze Phase Overview
- Hypothesis Testing
- ANOVA
- Regression
- Chi-square
- Graphical Analysis
- Lean Analysis Tools
- Analyze Phase Transition
- Improve Overview
- Lean Improvement Tools
- Introduction to Design of Experiments
- DoE Golf Experiment
- Implementation and Validation Solutions
- Improve Phase Transition
- Control Phase Overview
- Standard Work
- Control Charting
- Control Plans
- Control Phase Transition

Unit 3:

- Enterprise Leadership
- Handling Roadblocks
- Change Management and Team Management
- Benchmarking
- Performance Measures
- Financial Measures
- Team Management
- Voice of the Customer
- Charter and Tracking
- Overview of Measure Phase
- Data Types
- Exploratory Data Analysis
- Probability

Unit 4:

- Advanced Process Capability
- Overview of Analyze Phase

- Regression
- Multivariate
- Logistic Regression
- Statistical vs Practical Significance
- Sample Size
- Central Limit Theorem and Confidence Intervals
- ANOVA
- Chi-Square and Contingency Tests
- Non-Parametrics

Unit 5:

- Overview of Improve
- GB DOE Refresher Minitab
- Fractional Factorial Experiments
- Catapult
- Split Plot Designs
- Design for Six Sigma
- Advanced Lean Tools
- Review Implementation and Pilot Improvements
- Acceptance Sampling Plans
- Total Productive Maintenance
- Visual Management
- Measurement System Reanalysis
- Control Plan
- Sustain Improvements