LSSGB (LEAN SIX SIGMA GREEN BELT CLASSROOM) 1

Objetivo

–

PÃºblico Alvo

–

PrÃ©-Requisitos

–

Carga HorÃ¡ria

50 horas (7 dias).

ConteÃºdo ProgramÃ¡tico

COURSE OUTLINE

Introduction to Six Sigma
• History of Quality (Deming, Juran, JIT, Ishikawa, Taguchi, etc.)
• Evolution of Six Sigma
• Defining Six Sigma – philosophy and objectives
• Overview of Six Sigma DMAIC process

Stakeholders & Setting up a Six Sigma Project
1. Identifying and Documenting stakeholder requirements
• Identifying stakeholders and customers
• Data collection and analysis
• Determining critical requirements

2. Project Selection Criteria
• Identifying performance metrics
• Using financial criteria to evaluate project benefits
• Maximizing project benefits for the organization

3.Project Planning
• Creating Project Charter
• Charter Negotiation

4. Managing Team Dynamics
• Initiating teams
• Stages of team evolution
• Maslow's hierarchy of needs
• Motivation Techniques
• Conflict Resolution Techniques
• Management / Leadership styles
• Roles played by people in a project

5. Important project management & planning all

Six Sigma Methodology – Define
1. Inputs – Need for six sigma project, Executive management sponsorship, core team identified
2.Tools
• Organization hierarchy
• High level process maps
• High level Pareto charts
• Idea generation and categorization tools

3.Outputs
• project charter
• Established metrics
• Problem statement
• Roles & responsibilities

Six Sigma Methodology – Measure
1. Objectives of Measure Phase
2. Inputs – the outputs of the Define phase
3.Tools
• Data collection tools and techniques
• Measurement scales
• Validation techniques (Gauge R & R)
• Statistical distributions
• Data mining
• run chart
• Process map
• Stakeholder tools
• process costs

4.Outputs
• Well-defined processes
• Baseline process capability
• Process parameters affecting CTQs
• Cost of poor quality (COPQ)
• Measurement system

Six Sigma Methodology – Analyze
1. Objectives of Analyze Phase

2. Inputs – outputs of the Measure phase
3.Tools
• ishikawa diagram
• Failure mode and effects analysis
• Hypothesis testing
• Process capability study

4.Outputs
• Important causes of defects
• Special and common causes of variation
• DPMO and sigma level

Six Sigma Methodology – Improve
1. Objectives of Improve Phase
2. Inputs – outputs of the Analyze phase
3.Tools
• Returns on investment
• Solution design matrix
• Design of experiment
• Taguchi robustness concepts
• Response surface methodology
• Project planning and management tools
• prototypes

4.Outputs
• Cost / benefit for different solution
• Selection of solutions for implementation
• Implementation plan

Six Sigma Methodology – Control
1. Objectives of Control Phase
2. Inputs – outputs of the Improve phase
3.Tools
• control plan
• Statistical process control
• Lean enterprise
• 5S
• kaizen
• kanban
• Total production maintenance
• Measurement system reanalysis

4.Outputs
• implemented solutions
• Revised measurement system
• Control plan for sustaining benefits
• Improves process capability
• Lessons learned

Read
• A Value Stream Map
• Lean is Speed
• Total Supply Chain
• Lean Six Sigma Logistics

case studies
• Case Study Part 1
• Case Study Part 2
• Case Study Part 3