

Yellow Belt Lean Six Sigma Tables of Content

Introduction

- Introduction to Lean Six Sigma
- Historical development of Six Sigma
- Historical Development of Lean Management
- Lean Six Sigma integration
- Definition of DPU, DPMO, FTY, RTY Cycle Time
- Definition of CTQ,CTC, VOC,VOP
- The eight Types of Waste
- The 5S
- Value Stream Mapping

1) DEFINE Phase

- Introduction to Define
- Define Objectives
- Project Selection
- Define Tools

Step (1): Identify Project CTQS

- Focus on the Customer
- Voice of the Customer
- Product/Process Drill-Down Tree
- Identify Project CTQS

Step (2): Develop Team Charter

- Team Charter
- Business Case
- Problem & Goal Statements
- Project Scope
- Milestones
- Team Roles
- Project Exercise: Problem & Goal Statement
- Good Project vs. Bad Project
- Develop Team Charter

Step (3): Define Process Map

- Selecting the Right Projects
- High Level Process Map
- Project Approval Process
- Define Process Map
- CAP Tools
- Define Deliverables

2) MEASURE Phase

- Introduction to Measure
- Measure Overview
- Measure Objectives
- Measure Tools

Step (4): Select CTQ Characteristics

- Identify the Measureable Customer CTQ
- Select CTQ Characteristic Objectives
- Understanding Processes Objectives
- Process Mapping
- Pareto Chart
- Failure Modes & Effects Analysis
- Data Types
- Select CTQ Characteristics

Step (5): Define Performance Standards

- What is a Defect?
- Continuous and Discrete Data
- Establishing a Performance Standard
- Performance Standard

Step (6): Measurement Systems Analysis

- Sources of Variation
- Precision & Accuracy
- Gage Resolution
- MSA Checklist
- Gage Reproducibility & Repeatability Study
- Collecting the Data
- Analyzing Gage R&R Results Using Minitab

3) CONTROL Phase

- Introduction to Control
- Main Objectives
- Maintaining Control
- What is a Process Control System?
- Control Mechanisms
- Confirm the Solution
- Lean Control Tools (5S, Cellular Layout, Mistake Proofing, Quick Change Over, Standardize work)

Step (15) Implement Process Control

- Quality Planning
- The Quality Plan in the Project Lifecycle
- What is a Quality Plan?
- Process Controls
- Types of Control Plans

- Control Methods

Control Chart Summary

- Concepts
- Types of Control Charts
- Control Limits vs. Specification Limits
- Applying Control Processes to the Xs
- Control Deliverables
- Six Sigma Control Plans
- Cost Benefit Analysis
- Elements of the Control Plan