



21st Century Quality Six Sigma Green Belt (3 Day Training)

Six Sigma

Quality in the 21st Century requires in-control processes and disciplined improvement paths. The management approach has to be rigorous, customer-oriented and data-driven in order to meet expectations. Manufacturing typically has access to their processing data, however the real challenge is to use the data for assessing process control statistically and identifying opportunities for improvement. Six Sigma can help do just that.

Workshop Overview

The workshop is designed and delivered by personnel with expertise in 21st Century Quality and in the Six Sigma methodology; the Green Belt Training provides the participants in-depth understanding of tools and methods in the Six Sigma body of knowledge and their application in a manufacturing environment.

Numerous improvement projects in areas such as **Process Capability, Right First Time, Lot Rejection Rate, Lab Events** etc. have been successfully completed in these workshops. Application to **Product Life Cycle** and **Analytical Life Cycle** and **Continuous Process Verification** are also part of the workshop.

This 3-day program provides an opportunity for participants to apply the tools and methods to projects in their own business. A Six Sigma Coach provides mentoring on these projects. If participants do not have projects of their own, then anonymized representative projects can be provided.

Workshop Objective and Deliverables

The most appropriate tools and techniques used by the Six Sigma community have been incorporated. The training is highly contextual and experiential and extensively uses examples. This workshop will help participants:

- Apply the DMAIC methodology to their industry and projects.
- Lead a Six Sigma improvement team to solve performance problems by use of a structured, disciplined problem-solving approach.

The Trainer

MKV Saikumar is a Principal Consultant with 34 years of experience in quality management. Saikumar has been a certified Six Sigma Master Black Belt from the Indian Statistical Institute for the past 15 years. Saikumar has mentored over 700 six sigma projects and provided training to many Fortune 500 (and smaller) companies.

Who should attend

- Continuous Improvement Professionals
- Quality Professionals
- Regulatory Compliance Professionals
- Business / Operational / Process Excellence Teams
- Functional Managers (any function, including support functions)
- Production / Operations Staff

Workshop Contents

SIX SIGMA GREEN BELT		
DAY 1	DAY 2	DAY 3
INTRODUCTION TO SIX SIGMA	SAMPLING - TERMINOLOGY, SAMPLING TECHNIQUES, SAMPLE SIZE	VALIDATION OF CAUSES - CORRELATION, REGRESSION (SLR & MLR)
IDENTIFICATION OF PROJECTS - 4 VOICES	MEASUREMENT SYSTEM ANALYSIS - PERSON (REPEATABILITY, REPRODUCIBILITY) GR&R STUDY (ATTRIBUTE & VARIABLE)	VALIDATION OF CAUSES - HYPOTHESIS TESTING (DISCRETE - COUNT, CONTINUOUS - MEAN)
VOICE TO CTQ, DEFINING CTQ TREE	MONITOR STABILITY - RUN CHART GRAPHICAL REPRESENTATION - HISTOGRAM, BOX PLOTS	IDENTIFICATION & PRIORITIZATION OF SOLUTIONS
PROJECT CHARTER - BUSINESS CASE, PROBLEM STATEMENT, GOAL STATEMENT, SCOPE, MILESTONES, PROJECT PLAN,	PROCESS CAPABILITY - DISCRETE & CONTINUOUS.	IDENTIFY RISKS - FMEA
BASIC STATISTICS - DATA TYPES, DATA DESCRIPTION - MEASURES OF CENTRAL TENDENCY, DISPERSION	PROCESS ANALYSIS - PROCESS MAPPING SIPOC, FLOW CHARTS	PILOT & ROLL OUT OF SOLUTIONS
DATA COLLECTION PLAN	IDENTIFICATION & PRIORITIZATION OF CAUSES : CAUSE & EFFECT DIAGRAM, PARETO CHART	CONTROL CHARTS, CONTROL PLAN, PROJECT CLOSURE
INTRODUCTION/DEFINE	MEASURE / ANALYZE	ANALYZE / IMPROVE /CONTROL

Workshop Methodology

Methodology

- In-person Classroom / Online Instructor Led
- Case studies
- Class exercises

What you get from the class

- Courseware - Hard Copy
- Case Studies and Data Sheets (excel) - Soft Copy
- Sample Green Belt Assessments - Hard Copy

What do you bring to the class

- Laptop (with MS office)

Green Belt Certification Criteria

- Attend 3 Days Green Belt Training
- Pass the Assessment with 70% score.
- Complete 1 Improvement project (within 6 months of Assessment).