

Soft-Train



*At Soft-Train
Technology Works*

A Six Sigma Approach to Achieving Project Management Quality (4 Days) ST00087

COURSE GOAL: Ensure project success and customer satisfaction by building quality into projects.

PREREQUISITES: None

LEARNING OBJECTIVES:

Upon completion of this course the student will be able to:

- Control project scope, resources and performance
- Learn how to apply Six Sigma tools to project processes
- Eliminate process deficiencies for increased productivity
- Achieve greater efficiency for faster, better project execution

KEY TOPICS:

I. Preparing for Deployment

- A. Deployment Strategy
- B. What is Six Sigma?
- C. Difference Between Six Sigma and Total Quality Management (TQM)
- D. Six Sigma Lean
- E. Elements of Successful Deployment

II. Developing the Training and Deployment Plan

- A. Training Needs Analysis
- B. Executive Overview Training
- C. Champion and Management Training
- D. Black Belts
- E. Green Belts

III. Focusing the Deployment

- A. Customer Focus
- B. Monitor Customer Satisfaction
- C. Project Selection
- D. Chapter Quiz

IV. Define Stage

- A. Objectives
- B. Project Definition
- C. Top-Level Process Definition
- D. Team Formation
- E. Recommended Tools

V. Measure Stage

- A.** Objectives
- B.** Value-Stream Analysis
- C.** Analyzing Sources of Variation
- D.** Determining Process Drivers
- E.** Recommended Tools

VI. Improve Stage

- A.** Objectives
- B.** Standardize on the New Methods
- C.** Measure Bottom-Line Impact
- D.** Document Lessons Learned
- E.** Recommended Tools

VII. Six Sigma Tools

- A.** Affinity Diagrams
- B.** ANOVA
- C.** Autocorrelation Charts
- D.** Box-Whisker Chart
- E.** C Chart
- F.** Cause-and-Effect Diagram
- G.** Confidence Interval on Mean
- H.** Confidence Interval on Proportion
- I.** Contingency Tables
- J.** Contour Plot
- K.** Control Plan
- L.** Design of Experiments
- M.** Distributions
- N.** Equality of Variance Tests
- O.** Evolutionary Operation (EVOP)
- P.** EWMA Charts
- Q.** Factorial Designs
- R.** Failure Modes and Effects Analysis (FMEA)
- S.** SS
- T.** Flowchart
- U.** Gantt Chart
- V.** Goodness-of-Fit Tests

W. Histogram

- X.** Hypothesis Testing
- Y.** Individual X and Moving Range Charts
- Z.** Interaction Plots
- AA.** Lean Methodology
- BB.** Level Loading
- CC.** Linearity Analysis
- DD.** Matrix Diagrams
- EE.** Multi-Vari Plots
- FF.** Nominal Group Technique
- GG.** Nonparametric Test on Equality of Means
- HH.** Np Chart
- II.** P Chart
- JJ.** Pareto Chart
- KK.** Pert Analysis
- LL.** Prioritization Matrix
- MM.** Process Capability Index
- NN.** Process Cycle Efficiency
- OO.** Process Decision Program Charts
- PP.** Process Maps
- QQ.** Process Performance Indices
- RR.** Quality Function Deployment
- SS.** R&R Studies
- TT.** Regression Analysis
- UU.** Response Surface Analysis
- VV.** Run Test Rules
- WW.** Scatter Diagrams
- XX.** SIPOC
- YY.** Spaghetti Diagram
- ZZ.** Statistical Process Control (SPC) Charts
- AAA.** Transformation
- BBB.** U Chart
- CCC.** Velocity
- DDD.** Work Breakdown Structure
- EEE.** X-Bar Chart
- FFF.** Final Exam