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Lean Six Sigma BLACK BELT Training (Accelerated)#

DAY 1

1: Lean & Six Sigma Overview, Origin and Application, Enterprise-wise Deployment, Organizational roadblocks, Selecting Lean Six Sigma Projects
2: Lean, Six sigma and Organization Structure
3: DMAIC Plus Models, Customer satisfaction and Loyalty Development
4: Change Management (Team Mgmt/ Team Dynamics/ Decision Making Tools/ Project Management tools)

DAY 2

(I) DEFINE PHASE

5: Voice of Customer (VOC) (CTQ Tree/ Affinity Diagram/ Kano Model), Workshop-1*
6: Project Charter and Plan
7: SIPOC or COPIS

(II) MEASURE PHASE

8: Key Process Output Variable (KPOVs), Data, Operation definitions, Data Collection Plan

DAY 3

. . . MEASURE PHASE CONTINUED

09: Input/ output analysis, CE matrix
10: Measures of Location, Mean, Median, Mode, Measures of Variability, Range, IQR, Standard Deviation
11: Process Maps, SPAGHETTI
12: Lean thinking, Overall Equipment Efficiency (OEE)

DAY 4

. . . MEASURE PHASE CONTINUED

13: Value Stream Maps (VSM), Talkt Time, VA/NVAR/NVA Analysis, Workshop-2*
14: Key issues in measuring quality/ Measurement System Analysis (MSA)
15: Sampling/ Calculating sample size: Continuous Data/ Discrete Data
16: Voice of the Process (Cp, Cpk, Pp, Ppk)

DAY 5

(III) ANALYZE PHASE

17: Failure Modes and Effect Analysis (FMEA) (before Improve Phase)
18: Fish Bone Diagram and validation
19: Discrete Data Analysis (Bar Chart/ Pie Chart/ Pareto Chart)
20: Continuous Data Analysis (Histogram/ Box Plots)

DAY 6

TEST-1

... ANALYZE PHASE CONTINUED

21: Statistical Process Control (SPC)
22: Test for Mean, Variation, and Proportion (t test, paired t, f test, Chi Square test)
23: Analysis of variance (ANOVA), one-way, two-way

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DAY 7

... ANALYZE PHASE CONTINUED

24: Non-Parametric tests (Moods Median test, Levene's Test)
25: Continuous Data Analysis (Scatter plot and Regressions)
26: Multi-vari chart
27: Handoff Map & Swimlane Map

DAY 8

(IV) IMPROVE PHASE

28: Design of Experiment (Introduction, Screening, Characterizing, Optimizing)

DAY 9

... IMPROVE PHASE CONTINUED

29: Kanban/ Pull
30: 5S
31: Mistake proofing (Poka Yoke)
32: Piloting the Solution/ New FMEA/ New Process Capability/New VSM
33: Calculating Tangible benefits

DAY 10

V) CONTROL PHASE

34: Business Process Management (Process Documentation, Training plans, communication, audits, Key process Indicator, business review)
35: Statistical Process Control (ImR, p, np, c, u charts)
36: Lesson Learnt/ Rewards and Recognition

TEST-2

Note:

* Optional
# The Program Includes using MINITAB Statistical software for data analysis and interpretation of results

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