

Lean Six Sigma Statistical Analysis Tools in Six Sigma (SATSS)



INTRODUCTION

- ◆ This programme is designed by Six Sigma Practitioners who found the most appropriate Statistical Tools to be used for Process Improvement Projects.
- ◆ This programme draws case studies and examples from all business sectors ranging from transactional to manufacturing.
- ◆ This programme is aimed at participants who are working on improvement projects to analyse data using the most useful statistical tools, that are quantitative and intense, necessary for those determined to minimize corporate waste and maximise operational efficiency.
- ◆ This programme would help participants in describing data both graphically and numerically, whilst focusing on concepts, applications and interpretations of the tools used during the DMAIC stages.

Duration = 3 Days

COURSE CONTENT / CURRICULUM

DAY 1: CONTINUOUS DATA TOOLS

- ◆ Type 1 & Type 2 error
- ◆ Degree of Freedom
- ◆ Power and Sample Size
- ◆ 1 Sample t-Test
- ◆ 2 Sample t-Test
- ◆ Paired t-Test
- ◆ One way ANOVA
- ◆ Two way ANOVA
- ◆ Test of Equal Variance (TOEV) Tables

DAY 2: CONTINUOUS DATA TOOLS

- ◆ Correlation Analysis
- ◆ Simple Linear Regression
- ◆ Multiple Regression
- ◆ Best Subset Regression
- ◆ General Liner Model (GLM)
- ◆ Binary Logistics Regression
- ◆ Ordinal Logistics Regression
- ◆ Nominal Logistics Regression

DAY 3: ATTRIBUTE DATA TOOLS & NON-PARAMETRIC TESTS

- ◆ 1 Proportion Test
- ◆ 2 Proportion Test
- ◆ Chi-Square Test
- ◆ 1 Sample-Wilcoxon Test
- ◆ Mann-Whitney Test
- ◆ Kruskal-Wallis Test

Additional Curriculum: (Over 3 Days)

- ◆ *Hypothesis Testing*
- ◆ *Sigma Value / Z-Bench*
- ◆ *Graphical Tools for Statistics*
 - ◆ *Pareto Charts*
 - ◆ *Box Plots*
 - ◆ *Run Charts*
 - ◆ *Dot Plots*
 - ◆ *Scatter Plots*
 - ◆ *Matrix Plots*
 - ◆ *Histograms*
 - ◆ *Time Series Plots*

