

Graphical Tools - SigmaXL® Version 6.1

Basic and Advanced (Multiple) Pareto Charts

EZ-Pivot/Pivot Charts

Run Charts (with Nonparametric Runs Test allowing you to test for Clustering, Mixtures, Lack of Randomness, Trends and Oscillation.)

Basic Histogram

Multiple Histograms and Descriptive Statistics (includes Confidence Interval for Mean and StDev., as well as Anderson-Darling Normality Test)

Multiple Histograms and Process Capability (Pp, Ppk, Cpm, ppm, %)

Multiple Boxplots and Dotplots

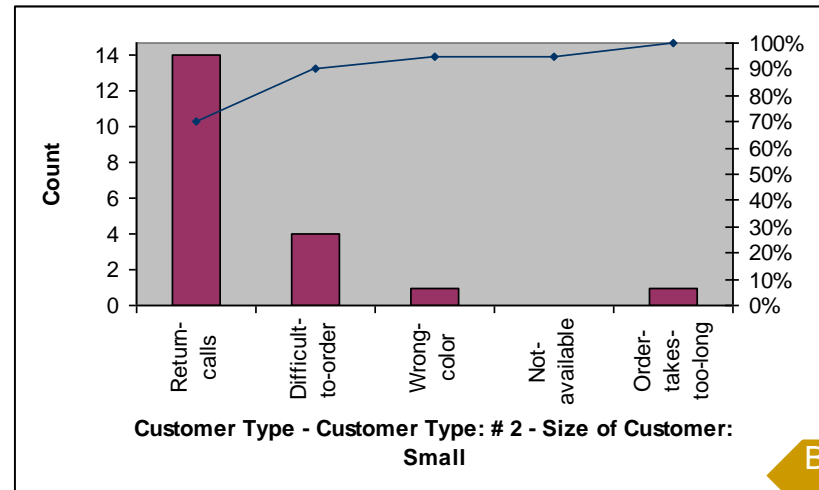
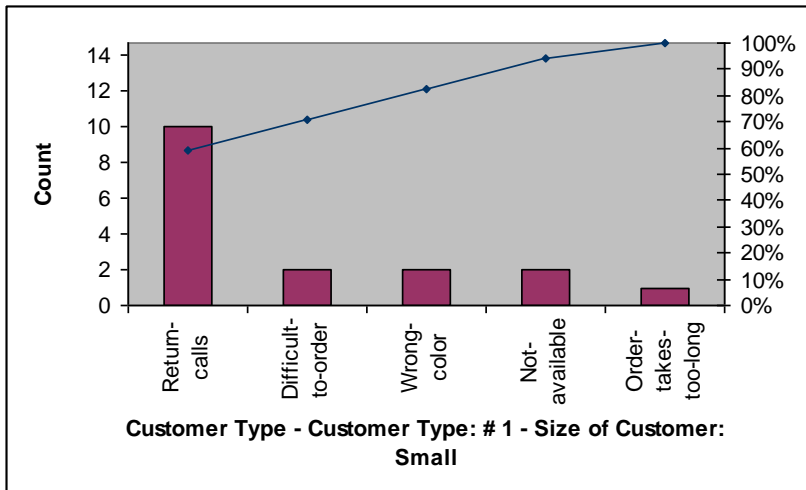
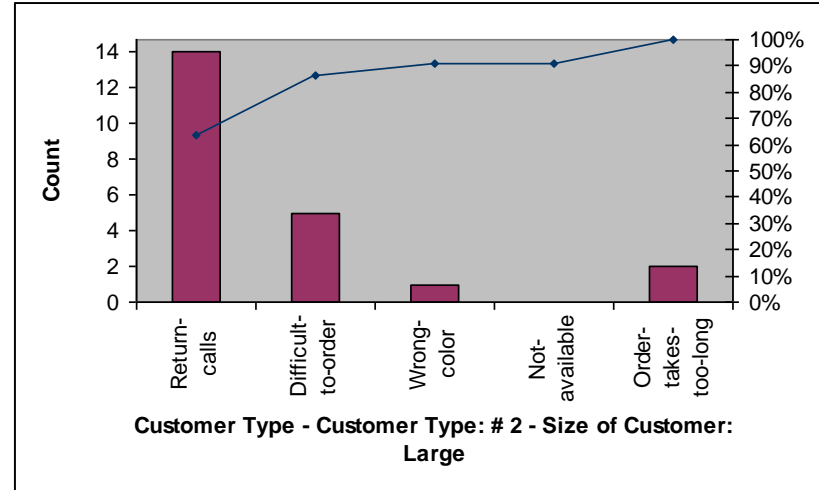
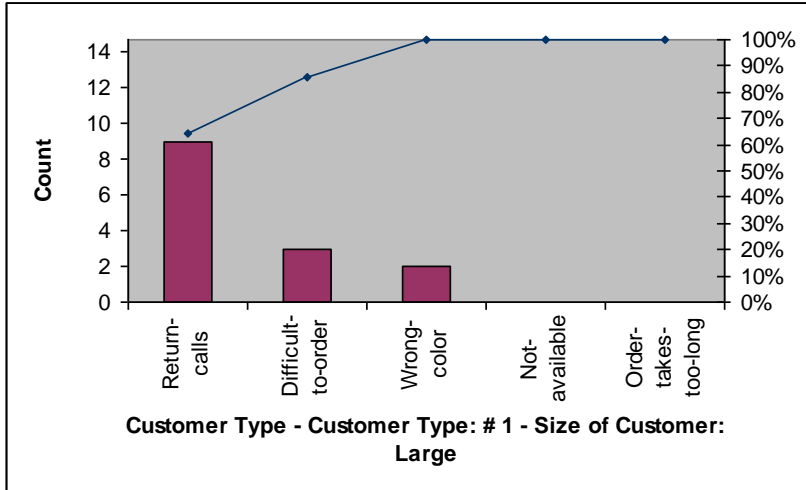
Multiple Normal Probability Plots (with 95% confidence intervals to ease interpretation of normality/non-normality)

Multi-Vari Charts

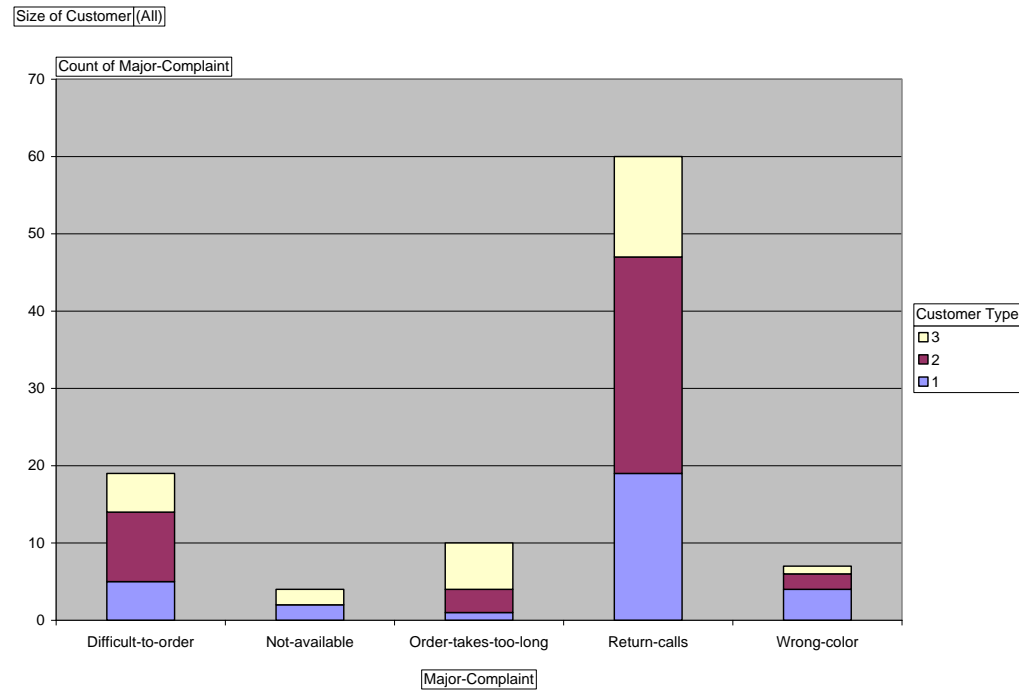
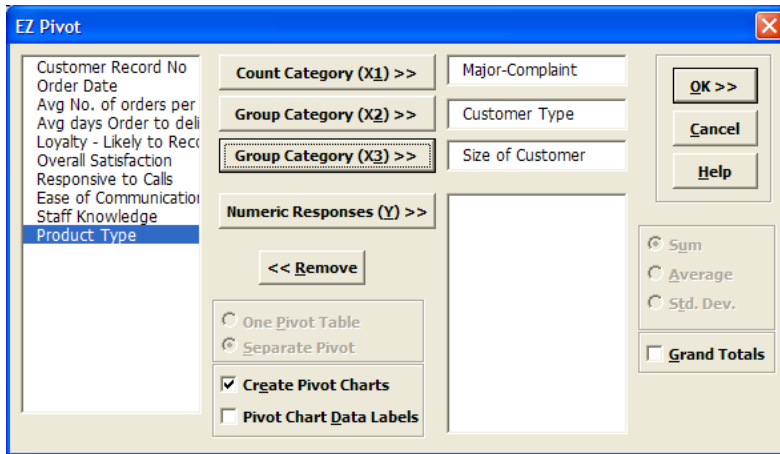
Scatter Plots (with linear regression and optional 95% confidence intervals and prediction intervals)

Scatter Plot Matrix

Graphical Tools: Multiple Pareto Charts

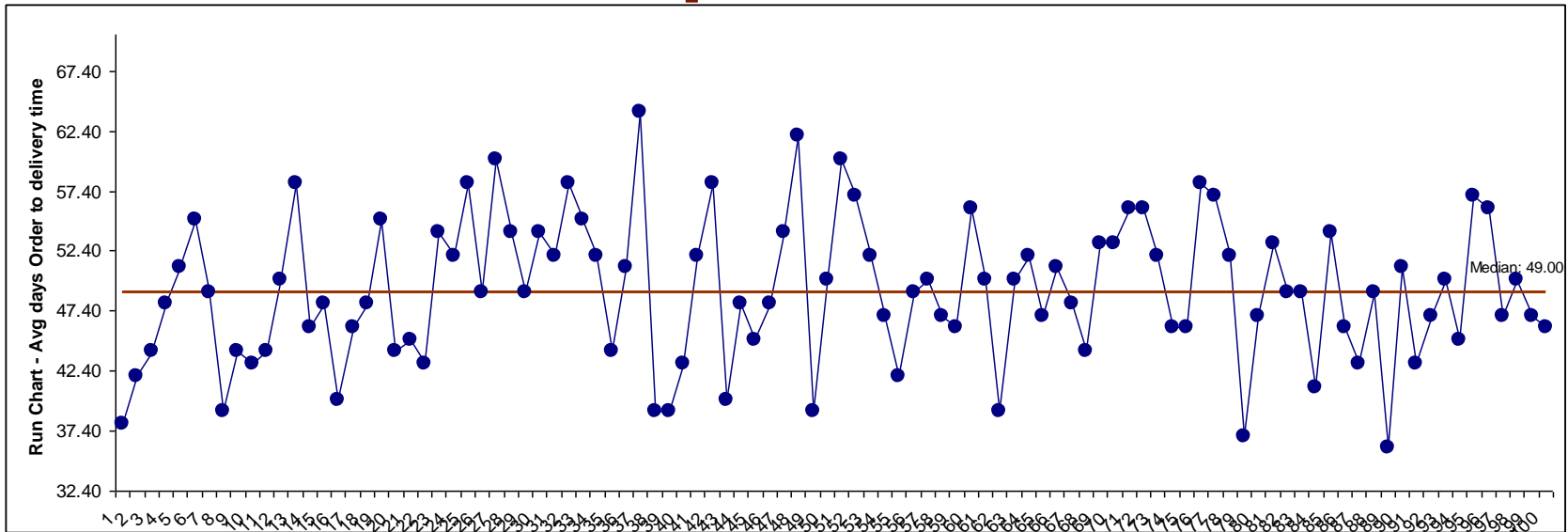


Graphical Tools: EZ-Pivot/Pivot Charts – The power of Excel’s Pivot Table and Charts are now easy to use!



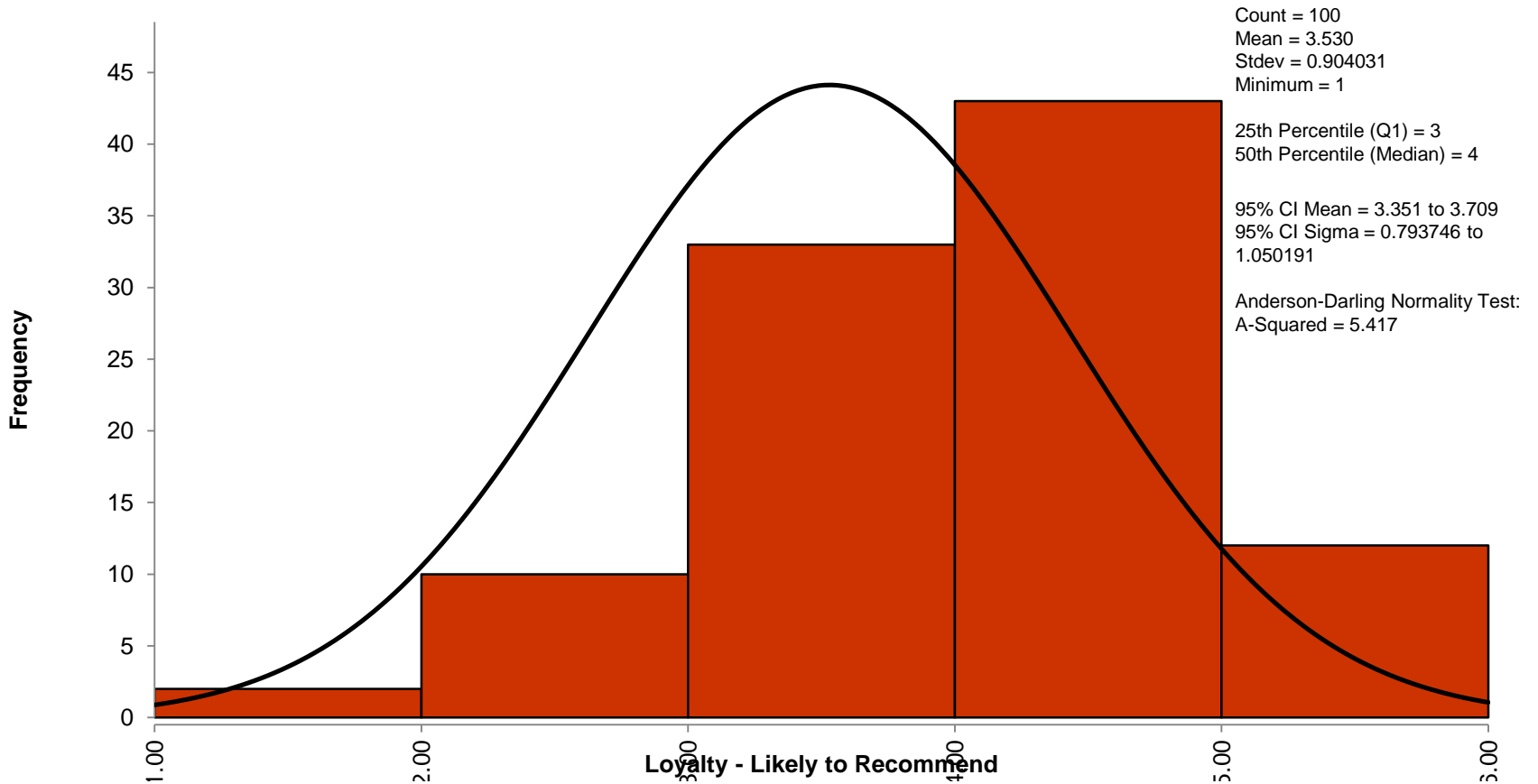
Size of Customer	(All)			
Count of Major-Complaint	Customer Type			
Major-Complaint		1	2	3
Difficult-to-order		5	9	5
Not-available		2	2	
Order-takes-too-long		1	3	6
Return-calls		19	28	13
Wrong-color		4	2	1

Graphical Tools: Run Charts with Nonparametric Runs Test

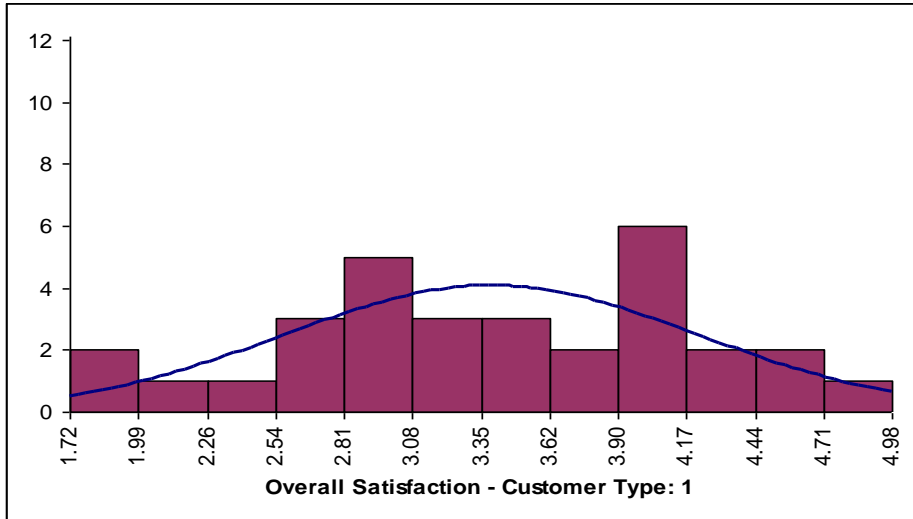


Nonparametric Runs Test: Avg days Order to delivery time	
Number of Runs about Median:	45
Expected Number of Runs about Median:	50.68
Number of Points above Median:	46
Number of Points equal to or below Median:	54
P-Value for Clustering:	0.1252
P-Value for Mixtures:	0.8748
P-Value for Lack of Randomness (2-Sided):	0.2505
Number of Runs Up or Down:	60
Expected Number of Runs Up or Down:	66.33333
P-Value for Trends:	0.0648
P-Value for Oscillation:	0.9352

Basic Histogram



Graphical Tools: Multiple Histograms & Descriptive Statistics



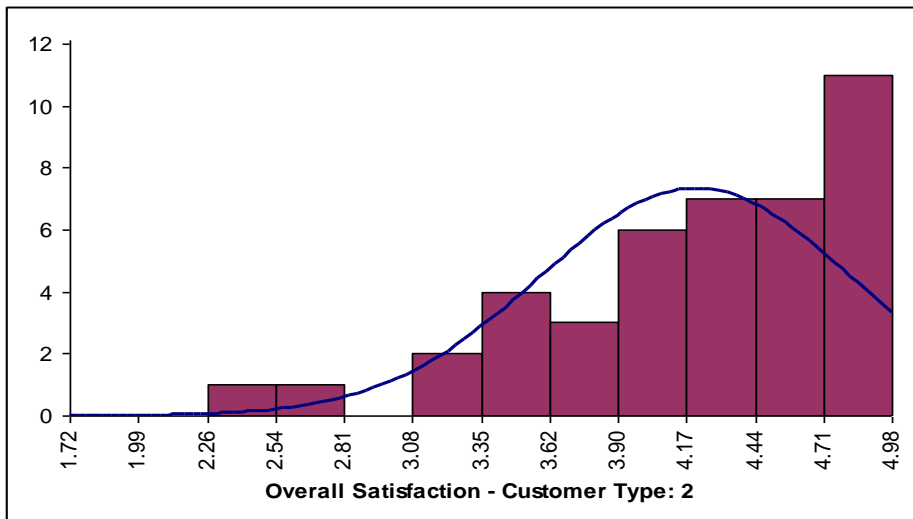
Overall Satisfaction - Customer Type: 1

Count = 31
 Mean = 3.3935
 Stdev = 0.824680
 Range = 3.1

Minimum = 1.7200
 25th Percentile (Q1) = 2.8100
 50th Percentile (Median) = 3.5600
 75th Percentile (Q3) = 4.0200
 Maximum = 4.8

95% CI Mean = 3.09 to 3.7
 95% CI Sigma = 0.659012 to 1.102328

Anderson-Darling Normality Test:
 A-Squared = 0.312776; P-value = 0.5306



Overall Satisfaction - Customer Type: 2

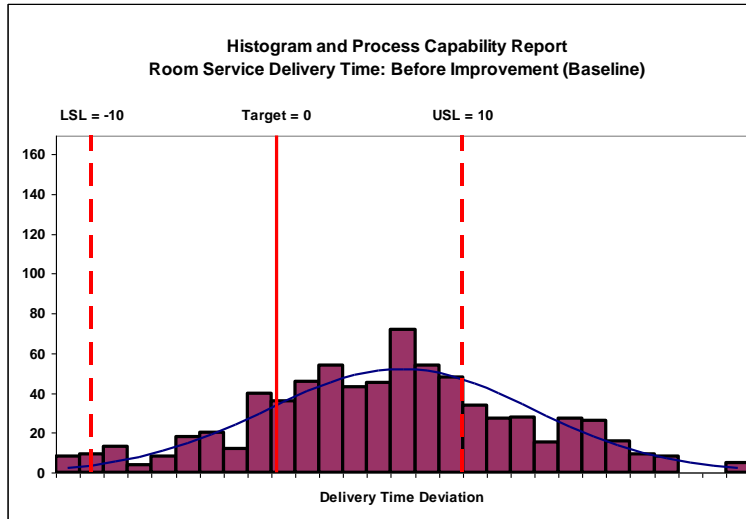
Count = 42
 Mean = 4.2052
 Stdev = 0.621200
 Range = 2.6

Minimum = 2.4200
 25th Percentile (Q1) = 3.8275
 50th Percentile (Median) = 4.3400
 75th Percentile (Q3) = 4.7250
 Maximum = 4.98

95% CI Mean = 4.01 to 4.4
 95% CI Sigma = 0.511126 to 0.792132

Anderson-Darling Normality Test:
 A-Squared = 0.826259; P-value = 0.0302

Graphical Tools: Multiple Histograms & Process Capability



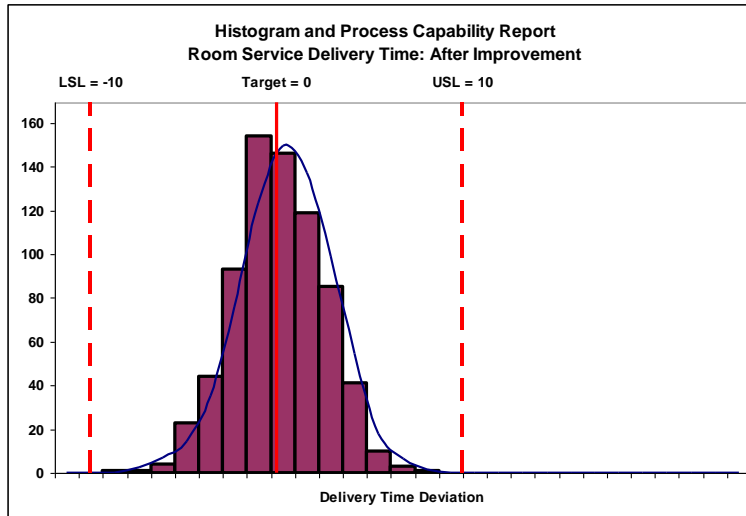
Count = 725
 Mean = 6.0036
 Stdev (Overall) = 7.1616
 USL = 10; Target = 0; LSL = -10

Capability Indices using Overall Standard Deviation
 Pp = 0.47
 Ppu = 0.19; Ppl = 0.74
 Ppk = 0.19
 Cpm = 0.36
 Sigma Level = 2.02

Expected Overall Performance
 ppm > USL = 288409.3
 ppm < LSL = 12720.5
 ppm Total = 301129.8
 % > USL = 28.84%
 % < LSL = 1.27%
 % Total = 30.11%

Actual (Empirical) Performance
 % > USL = 26.90%
 % < LSL = 1.38%
 % Total = 28.28%

Anderson-Darling Normality Test
 A-Squared = 0.708616; P-value = 0.0641



Count = 725
 Mean = 0.09732
 Stdev (Overall) = 2.3856
 USL = 10; Target = 0; LSL = -10

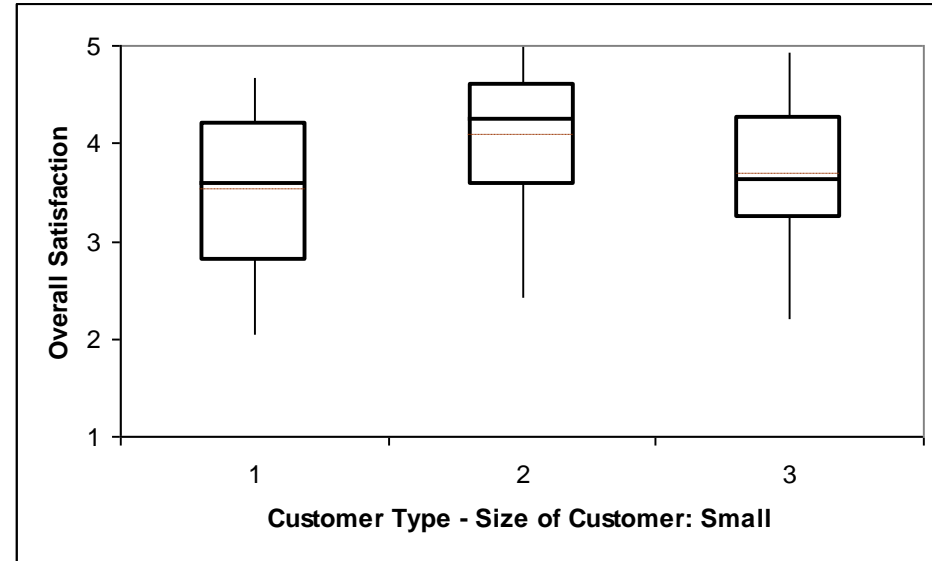
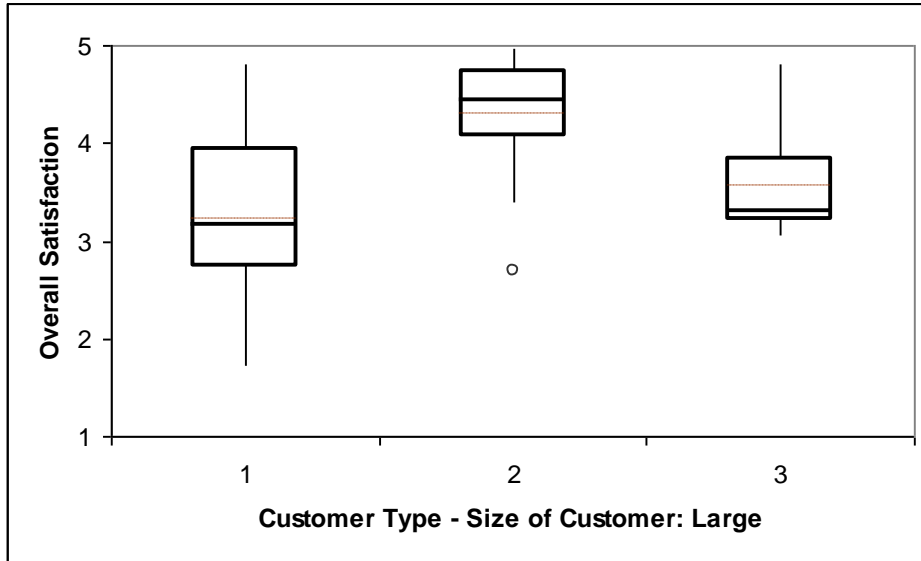
Capability Indices using Overall Standard Deviation
 Pp = 1.40
 Ppu = 1.38; Ppl = 1.41
 Ppk = 1.38
 Cpm = 1.40
 Sigma Level = 5.53

Expected Overall Performance
 ppm > USL = 16.5
 ppm < LSL = 11.5
 ppm Total = 28.1
 % > USL = 0.00%
 % < LSL = 0.00%
 % Total = 0.00%

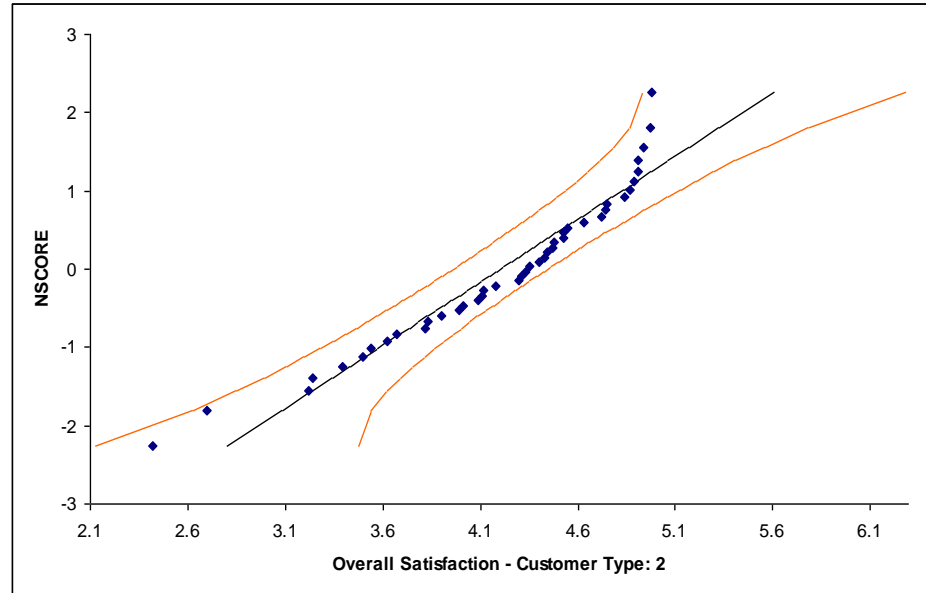
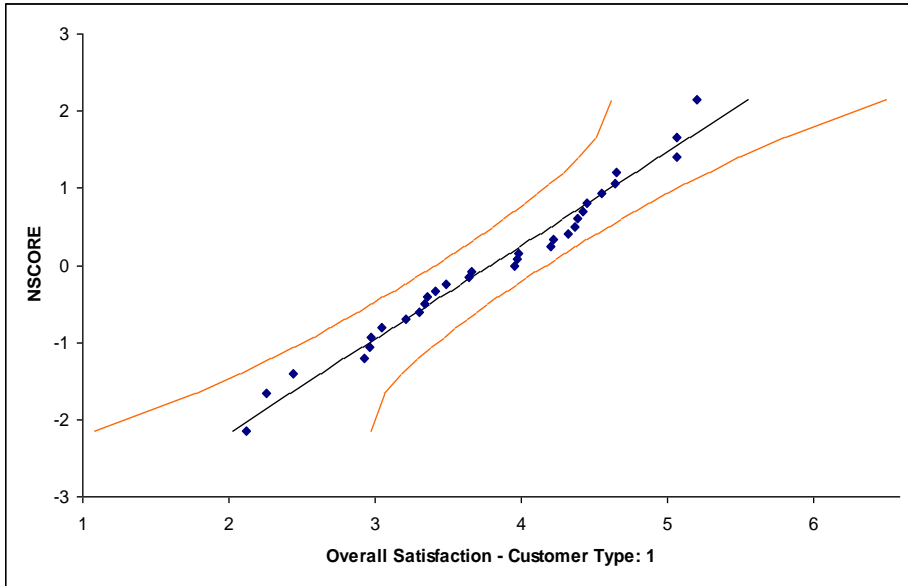
Actual (Empirical) Performance
 % > USL = 0.00%
 % < LSL = 0.00%
 % Total = 0.00%

Anderson-Darling Normality Test
 A-Squared = 0.189932; P-value = 0.8991

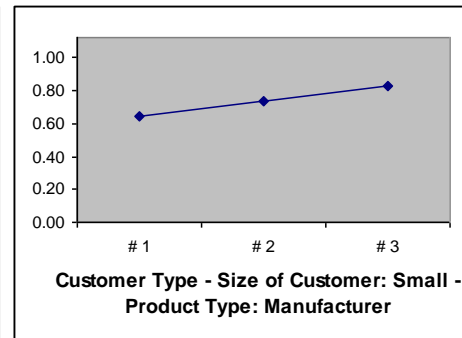
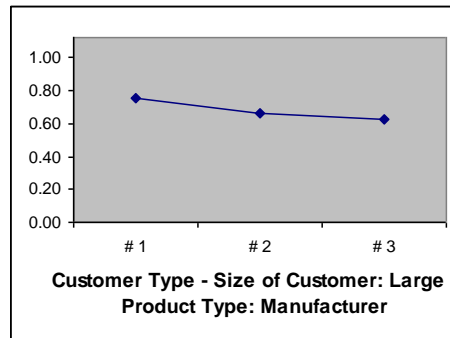
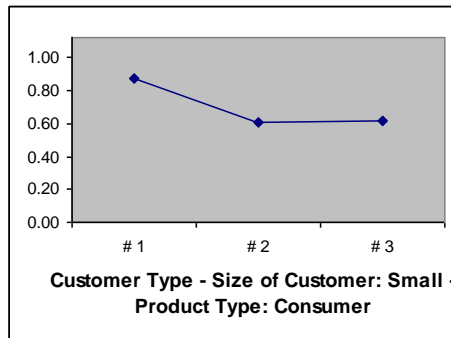
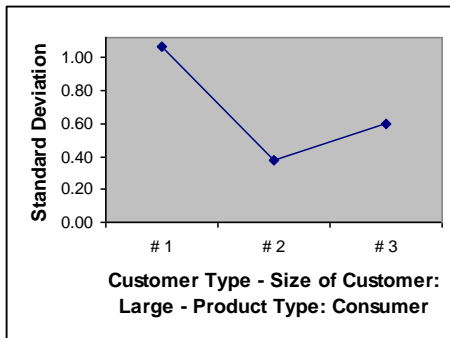
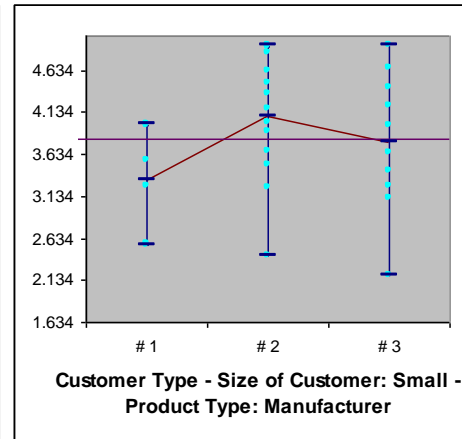
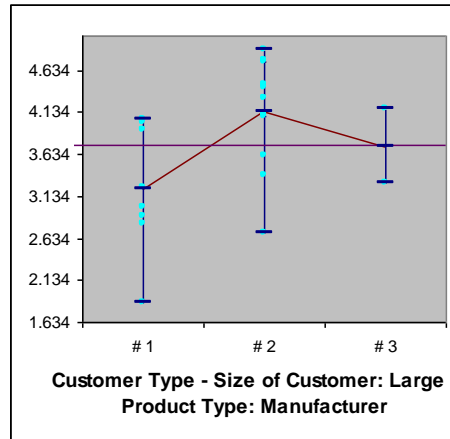
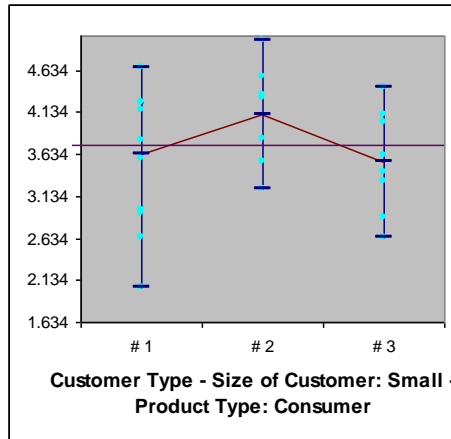
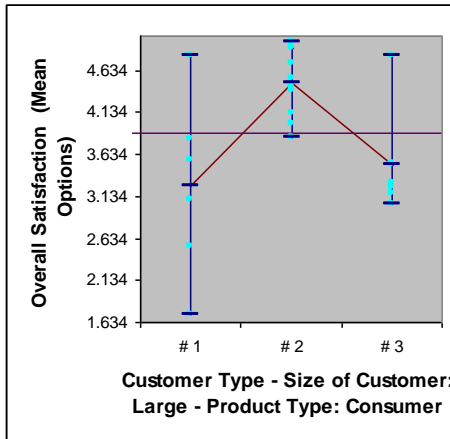
Graphical Tools: Multiple Boxplots



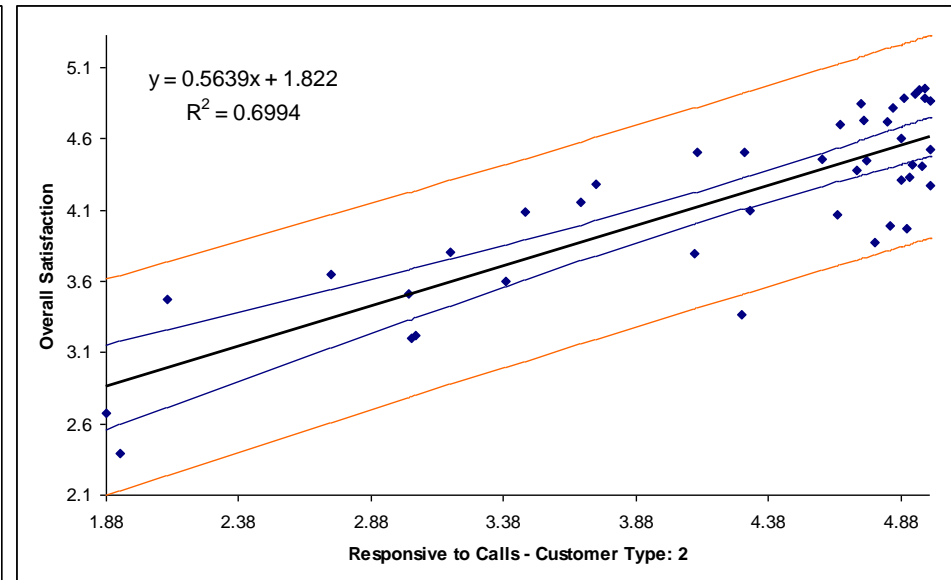
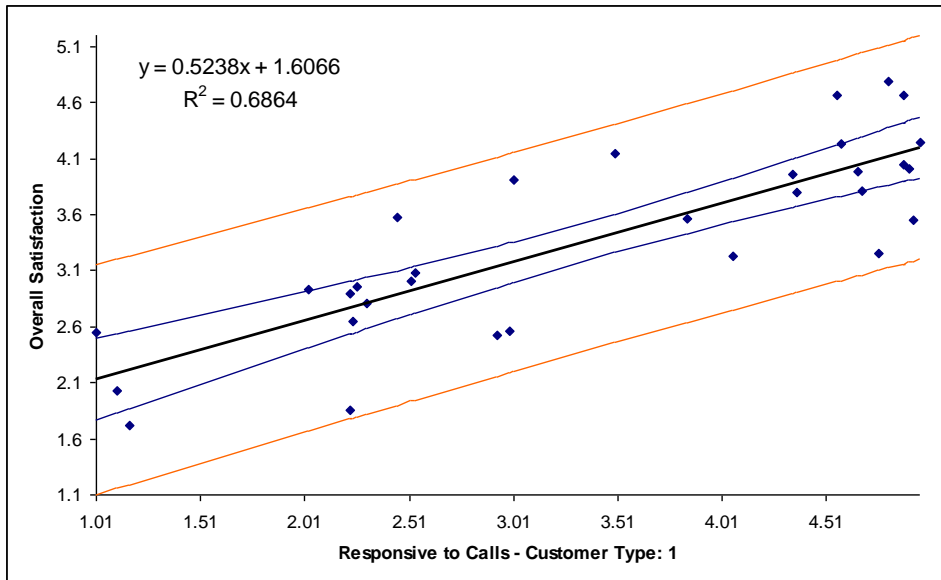
Graphical Tools: Multiple Normal Probability Plots



Graphical Tools: Multi-Vari Charts



Graphical Tools: Multiple Scatterplots with Linear Regression



**Linear Regression with 95%
Confidence Interval and Prediction Interval**

Graphical Tools: Scatterplot Matrix

