



## Business Process Improvement for Every Department

### Objectives

Participants will have an inclusive insight of regression analysis, which is a highly used method to forecast future values. The participants will have a comprehensive understanding of forecasting procedures in different trend models and business functions. The analysis is essential to pursue improved business processes.

### Course Contents

We cover all the important aspects and business applications of regression analysis and forecasting methods as attempts to recognize patterns that have existed in the past and extrapolate these patterns into the future such as sales historical data, company expense records, etc.

The participants will learn how to evaluate the goodness-of-fit of the model and how to determine whether the relationship among variables (like a machinery maintenance cost, machine age, machine power, machine usage hours, etc.) is statistically meaningful.

### Course Outlines

1. Prediction Function & Errors (Residuals).
2. Regression Analysis: Assumptions, Models and Outputs.
3. Prediction Intervals.
4. Multiple Regressions.
5. Confidence Interval.
6. Hypothesis Test (p-value).
7. Use of Dummy Variables.
8. Forecasting Models.



### Designed For

When first introduced at Motorola, Six Sigma was used extensively to improve product quality, mostly in manufacturing settings. The New Six Sigma is a management system for running the business on a day-to-day basis. **(Source: Motorola University)**. For the same purpose, this training is open for every manager and professional from different departments, businesses and industries as we will exercise the six sigma tools in a variety of business application scenarios.