



Transforming Data into Decision-powering Weapons

Organizing, summarizing, analyzing and presenting data for decision-making

Synopsis

Data, data, data ... data everywhere !!!

Today's Managers and Business Executives find themselves constantly surrounded by voluminous masses of data, figures and numbers of all kinds, from multi-farious sources. This presents both problems as well as **opportunities**. We can choose to allow ourselves to be overwhelmed, overpowered or even confused by these numbers, or we can pick the **wiser** alternative of learning how to harness them into useful information for **sound business decisions ...**

Yet, isn't it ironical that in this era of information overload, many business organizations are surprisingly also faced with deficiencies in the RIGHT types of information to drive organisational excellence?! Ponder over this for a minute ... Why are so many organizations ignorant of gross customer unhappiness with their service levels? Why are businesses oblivious to the fact that customers are frustrated to hell, trying to get through their hotlines?

Many organizations collect voluminous amounts of data, from customer satisfaction surveys, for instance, only to stash them away! Numbers from such sources can potentially be turned into weapons, if relevantly analysed to fuel improvement programs. From garbage to gems!

What you will learn

At the end of this course, participants will:

- ✓ know how to select the graphical presentation format/type that best suits the application
- ✓ understand the adverse effects of poor graphical techniques on decision-making
- ✓ see how the use of simple charting & statistical techniques can help turn a wilderness of seemingly unintelligible figures into useful and meaningful decision-making aids
- ✓ have picked up some pointers on the design of Key Performance Indicators
- ✓ be introduced to the POWER of Excel in data analyses

What ex-participants say they like about this program

- ✓ Simulation game
- ✓ How to analyse data and draw conclusions from the data
- ✓ How to implement Pareto diagram on issues is my favourite part
- ✓ Instructor's coaching
- ✓ Good subject, good trainer
- ✓ Lucid presentation ... never a dull moment
- ✓ The content is very applicable to my work scope
- ✓ Appropriate content; well organized and presented
- ✓ Instructor's knowledge of the subject is excellent
- ✓ The clear delivery and explicit explanations made even complex calculations/methods appear easy
- ✓ This course is very comprehensive and applicable to most industries and departments

Course Structure

- ❑ The 7 QC tools & the Samurai's 7 Weapons
- ❑ Comparative data
- ❑ Time trends
- ❑ An alternative to boggling composite bar charts
- ❑ Breakdown of causes contributing to a problem
- ❑ The nature of data (Variables vs Attributes): Implications on charting
- ❑ The role of data and charts in decision-making
- ❑ Data, information, problem-solving & decision-making
- ❑ Histograms
- ❑ Distributions
- ❑ Mean & standard deviation
- ❑ Scatter plots
- ❑ Correlation & Simple Regression analyses
- ❑ An Overview on Design of KPIs
- ❑ Deciding on the correct treatment (analysis & charting) for a given application
- ❑ Real-life case studies

Course duration

2 days

Course methodology

Lectures & tutorials, discussions, simulation game, Excel enrichment ...

Participants are strongly encouraged to bring their real-life work data into the classroom as case studies ... The data can be massaged, disguised, transformed to protect the its confidentiality

Who should attend

Anyone who collects, analyses, manages, presents data and uses the data for decision-making in his/her work

Any industry, any function ...

For engineers and R&D scientists, this 101 course is the starter for a main course in **Statistics for Engineering and R&D**

