# Power BI Desktop

## Data Analytics and Business Intelligence

## Summary

**This course provides an introduction on how to refine, analyze and visualize data with Power BI Desktop.**

A rich corporate data set is used to build a professional quality interactive dashboard. The relationships between various data sources are defined to create a relational data model. This model forms the foundation for an interactive dashboard with a variety of exhibits.

Participants will be able to explore the company's data by cross-filtering and drilling down through various levels in the exhibits.

This course is designed as an introduction to Microsoft Power BI Desktop which is free to download and install.

*Note: Power BI Desktop software is currently only available for PC / Windows.*

### ☆ Prerequisites

Participants should have a basic working knowledge of Excel and are expected to download & install Power BI Desktop in advance of the course.

### 🕐 Timing

This course requires 1 day.

## Learning Topics

### 1. Connecting & Refining Data
- ✓ Overview of Power BI interface and workflow
- ✓ Review some common types of data connections
- ✓ Discuss best practices for editing queries
- ✓ Settings for defining data categories
- ✓ Demonstration of basic table transformations
- ✓ Tools used to manipulate text, numbers and dates
- ✓ Creating Index and conditional columns

### 2. Building a Relational Data Model
- ✓ Review of best practices for data modeling
- ✓ Common guidelines for database normalization
- ✓ Discussion of lookup tables and data tables
- ✓ Understanding primary keys and foreign keys
- ✓ Creating, defining and editing table relationships
- ✓ Review of star schemas and snowflake schemas
- ✓ Discussion of relationship cardinality

### 3. Data Visualization with Reports
- ✓ Best practices and guidelines for report design
- ✓ Introduction and layout of the Report View
- ✓ Adding various visualizations to reports
- ✓ Visualization options for fields and formatting
- ✓ Using slicers to filter report visualizations
- ✓ Filtering at various levels in Report View
- ✓ Editing interactions to control cross-filtering