

# Microsoft Power BI Fundamentals Training

## Introduction to MS Power BI for Beginners

### Description

This one-day course is designed to familiarise the attendees with the fundamental concepts forming building blocks in MS Power BI. It instructs participants on how to easily build reports and dashboards, navigate a dataset and generate useful visualizations that would aid in generating insights from the dataset.

### Outline

Introduction to Power BI  
 Developing Reports in Power BI Desktop  
 Power BI Service

### Prerequisite

None

### Objectives

Using appropriate data, we introduce delegates to:

- MS Power BI Desktop
- Create Visualizations
- Data Modelling and Visualizations using MS Power BI Desktop
- Sharing with MS Power BI Service with your team
- Building models to represent these relationships, with Python and R

### Outcome

Delegates will leave the sessions with appropriate knowledge on using Power BI to more efficiently connect and transform data to create compelling visualizations and reports.

### Program

#### Introduction to Power BI

- **What is Power BI?**
- **Core components:**
  - Power BI Desktop
  - Power BI Service
  - Other (mobile, gateway, report builder ...)
- **Licensing:**
  - Free features
  - Power BI Pro
  - Power BI Premium
- **Strengths and limitations**

#### Developing Reports in Power BI Desktop

- **Connecting to and loading data**
- **Creating and configuring report visuals:**
  - Column/bar
  - Line
  - Tables / Matrices
  - Cards
  - Gauges
  - Basic maps
  - Text boxes and images
- **Report themes and templates**
- **Using the filter pane, slicers and cross-filtering**
- **Preparing, transforming and cleaning data (Power Query) - e.g.:**
  - Choose Columns
  - Renaming
  - Filtering
  - Change Types
  - Add columns (simple text/number, conditional, calculate durations)

- Grouping
- Replace Values
- Split Column
- Merging data
- Appending
- **Data modelling**
  - Relationships
  - Star Schema - Facts and Dimensions
  - Date tables
- **Introduction to DAX:**
  - Calculated Columns - e.g. RELATED(), LOOKUPVALUE(), DATEDIFF()
  - Measures - e.g. SUM(), AVERAGE(), DISTINCTCOUNT(), CALCULATE(), DATESYTD()
  - Tables - e.g. SUMMARIZECOLUMNS(), CALENDAR()
  - DAX Formatter
  - Using Variables (VAR ; RETURN)
- **Drill-down / hierarchies**
- **Drill-through**

## Power BI Service

- Navigating Power BI Service
- Workspaces
- Publishing reports
- Sharing reports
- Data refresh in Power BI Service
- Subscriptions
- Dashboards
- Apps
- Introduction to Row-Level Security

## Training Times

- 09:00 - 10:30 Lesson 1 (1.5 Hours)
- 10:30 - 11:00 Break
- 11:00 - 12:30 Lesson 2 (1.5 Hours)
- 12:30 - 13:30 Lunch
- 13:30 - 14:30 Lesson 3 (1 Hour)
- 14:30 - 15:00 Break
- 15:00 - 16:00 Lesson 4 (1 Hour)