

## Power BI – introduction (2 day)

### Overview

There is a lot to learn in Power BI, this course takes a comprehensive look at the fundamentals of analysing data and includes a balanced look at the four main components that make up Power BI Desktop: Report view, Data view, Model view, and the Power Query Editor. It also demonstrates how to utilise the online Power BI service.

It looks at authoring tools that enable you to connect to and transform data from a variety of sources, allowing you to produce detailed reports through a range of visualisations, in an interactive and dynamic way.

It also includes a detailed look at formulas by writing both M functions in Power Query, and DAX functions in Desktop view. This knowledge will allow you to take your reports to the next level.

### Learning objectives

The aim of this course is to provide a complete introduction to understanding the Power BI analysis process, by working hands-on with examples that will equip you with the necessary skills to start applying your learning straight away.

### Who should attend?

Managers and others who need to use or create reports and tables to support business management and decision-making.

### Pre-requisites

An intermediate level understanding of Microsoft Excel is preferable.

### Course format

A very practical, interactive two-day session for a maximum group size of 8. Comprehensive materials provided, including exercise files and a unique step-by-step guide developed by the trainer specifically for this programme.

This course can be run remotely online or face-to-face onsite.

## Expert trainer

**Alan** is a highly experienced and very popular IT skills trainer. After eighteen years as an employed IT trainer and training manager he went independent in 2013, specialising in Microsoft Office courses, primarily Power BI, Excel, PowerPoint, Word, Outlook and Access, although he also delivers training in other programs when required. His clients come from all sectors and include such organisations as The Economist, Hyundai, Marston Group, MediaCom, London Borough of Harrow, Paragon Customer Communications, ICP Global Creative, Bywaters, Amsafe Bridport, Seetec, Trumpf, Hyundai, etc, etc.

See what some of the participants have said about the workshops he's delivered for us:

'Fantastic. Well-paced and easy to follow.'

'Great experience.'

'Very personable, relatable, patient and able to present complicated processes in an understandable way.'

'Friendly and good at checking people are up to speed.'

'Very good and explained and answered all questions.'

'Explains everything well.'

'Excellent teacher and very intelligent.'

'Very knowledgeable would love to have him again if there is another course – thank you.'

'Alan explains things very clearly and addresses issues on questions before they are visible. Thank you very much!'

## Workshop outline

### 1 Getting Started

- The Power BI ecosystem
- Opening Power BI Desktop
- Power BI's four views
- Introduction to Dashboards

### 2 Importing Files

- Importing data sources
- Importing an Excel file
- Importing a CSV file
- Importing a database
- Connect to an SQL Server Database
- Import vs. Direct Query
- Importing from the web
- Importing a folder of files
- Managing file connections

### 3 Shape Data in the Query Editor

- The process of shaping data
- Managing data types
- Keeping and removing rows
- Add a custom column
- Appending tables together
- Hiding queries in reports
- Fixing error issues
- Basic maths operations

### 4 The Data Model

- Table relationships
- Relationship properties

### 5 Merge Queries

- Table join kinds
- Merging tables

### 6 Inserting Dashboard Visuals

- Things to keep in mind
- Inserting maps
- Formatting Maps
- Inserting charts
- Formatting Charts
- Inserting a tree map
- Inserting a table, matrix, and card
- Controlling number formats
- About report themes
- Highlighting key points
- Filter reports with slicers
- Sync slicers across dashboards
- Custom web visuals

### 7 Publish and share Reports

- Publishing to Power BI service
- Editing online reports
- Pinning visuals to a dashboard
- What is Q&A?

- Sharing dashboards
- Exporting reports to PowerPoint
- Exporting reports as PDF files

## 8 The Power Query Editor

- Fill data up and down
- Split column by delimiter
- Add a conditional column
- More custom columns
- Merging columns

## 9 The M Functions

- Inserting text functions
- Insert an IF function
- Create a query group

## 10 Pivoting Tables

- Pivot a table
- Pivot and append tables
- Pivot but don't aggregate
- Unpivot tables
- Append mismatched headers

## 11 Data Modelling Expanded

- Understanding relationships
- Mark a date table

## 12 DAX New Columns

- New columns and measures
- New column calculations
- Insert a SWITCH function

## 13 Introduction to DAX Measures

- Common measure functions
- Insert a SUM function
- Insert a COUNTROWS function
- Insert a DISTINCTCOUNT function
- Insert a DIVIDE function
- DAX rules

#### 14 The CALCULATE Measure

- The syntax of CALCULATE
- Insert a CALCULATE function
- Control field summarisation
- Things of note

#### 15 The SUMX measure

- X iterator functions
- Anatomy of SUMX
- Insert a SUMX function
- When to use X functions

#### 16 Time Intelligence Measures

- Importance of a calendar table
- Insert a TOTALYTD function
- Change financial year end date
- Comparing historical data
- Insert a DATEADD function

#### 17 Hierarchies and Groups

- Mine data using hierarchies
- Compare data in groups

**Any questions?**

**Please just give us a call on 01582 463463 – we're here to help!**

**Or visit [www.theinhousetrainingcompany.com](http://www.theinhousetrainingcompany.com)**