# Microsoft Power Bi – Introduction



Call: 01628 810 196 | jessica@dynamix-training.co.uk | www.dynamix-training.co.uk

This one-day course is designed for new users of this exciting Microsoft Program. It will provide participants with a thorough foundation in the principles of connecting to, modelling and visualising data.

This course is run on a bespoke basis, giving you the opportunity to tailor the course to your exact requirements. To provide a starting point, we'd recommend you use the suggested course outline as a guide only.

The course runs from 9.30 am to approximately 4.30 pm.

Duration: 1 day.

#### Introduction to Power Bi Interface

Importing data types
Linking to excel documents
Web pages
Principles behind linking to SQL servers
Updating and managing links

#### Working with the query editor

The query editor interface Connecting data via the query editor Understanding the applied steps feature

# **Combining Data sources**

Appending data
Merging multiple sheets with different columns
Creating relationship between data queries
Understanding Join types
Data Relationship in Power Bi

### **Understanding relationship concepts**

Autodetect relationship
Creating Manual Relationship
The relationship views
Visualising data
Exploring available visuals
Creating a data table
Formatting a visual

#### Filters and Interaction

Controlling interaction between visuals Visual filter Page level filters Report Level Filters Using Slicers

#### Publishing and sharing dashboard

Explaining different Power Bi Accounts Creating a PowerPoint from Bi report Adding visuals to a dashboard Intro to App workspace



# Maximise Power BI's features to create more complex calculations in DAX



Call: 01628 810 196 | jessica@dynamix-training.co.uk | www.dynamix-training.co.uk

Our Dax training course for Microsoft Power BI is aimed at Power BI users who are looking to get even more out of this popular tool. We will show you how to use Power BI's functionality to produce stunning visuals and how DAX can be used in order to create complex calculations which will allow you flexibility beyond that offered by the standard toolset.

A number of optional topics exist which can be requested for private courses, depending on your organizations business requirements.

#### Audience

Business Analysts, Financial Analysts, Data Scientists and Staff who already use Power BI or who have attended our introduction course and who need to explore its features in more depth. Developers and Super Users/ Power Users looking to get more out of Power BI

Learn to build Dashboards like this - Typically used for CFO Dashboards, Revenue & Profitability, Expense Management, Financial Planning & Analysis, Sales, Stock Control, Risk & Compliance Analysis...

This course is run on a bespoke basis, giving you the opportunity to tailor the course to your exact requirements. To provide a starting point, we'd recommend you use the suggested course outline as a guide only.

The course runs from 9.30 am to approximately 4.30 pm.

Duration: 1 day.

#### DAX

DAX Basics review
Table Functions
Evaluation Contexts
Filter and Row Context

#### **Calculate**

Evaluation Contexts and Relationships
Time Intelligence Calculations
DAX as a Query Language: use of DAX Studio
Advanced Table Functions
Advanced Evaluation Context DAX (Understanding
Cross filters)
Calculations over Hierarchies
Parent/Child Hierarchies
Creating Dynamic titles
Using parameter table
Capturing and debugging queries with Dax Studio

### **Data modelling**

Creating a Bridge Table Role Playing Tables with DAX Role Playing Tables without DAX Mismatched Granularies



# **Power BI Introduction - 1**



Call: 01628 810 196 | jessica@dynamix-training.co.uk | www.dynamix-training.co.uk

Power BI is a business analytics service provided by Microsoft. It provides interactive visualizations with self-service business intelligence capabilities, where end users can create reports and dashboards by themselves, without having to depend on any information technology staff or database administrator.

The course runs from 9.30 am to approximately 4.30 pm. Duration: 1-2 day Intro.

#### Day 1

#### **Getting Started**

Power BI Editions, The three key elements of Power BI, Dashboards, reports and datasets, Exploring the Power BI sample data sets

#### **Connecting to File Sources**

Connecting to CSV files, Connecting to Excel data, Importing Excel data, Connecting to a folder of data

# **Connecting to Web Sources**

Recognizing standard text formats, Using web preview, Connecting to web tables, connecting to a SharePoint list

#### **Connecting to Databases**

Connecting to Microsoft Access data files, Connecting to Access online data sources, Connecting to SQL Server, Making a live connection to SQL Server

### Cleaning up and transforming data

Using the Query Editor, Understanding query steps, Renaming columns, Reordering and deleting columns, Changing data types, Unpivot Columns, Replace Values, Append Queries, Merge Queries, Grouping data

#### **Parameters and templates**

Parameterization of data sources, Using parameters when transforming data, Creating Power BI templates

#### **Data modelling**

Automatic detection of relationships, Defining relationships manually, Cross filter direction, Creating calculated columns, Creating measures, Creating calculated tables, Creating hierarchies, Writing DAX functions

#### **Creating Visualizations**

Creating and populating visualizations, Formatting visualizations, Tooltips, Moving and aligning visualizations, Duplicating visualizations, Adding logos and images, Adding text and hyperlinks

## **Big picture Visualizations**

Cards and gauges, Using slicers, Using filters, Understanding visual level, page level and report level filters, Specifying visual interactions

# **Granular Visualizations**

Creating column and bar charts, Creating line and area charts, Creating scatter charts, Treemap visualizations, Using charts as slicers, Creating drilldown experiences



# **Power BI Introduction - 2**

Our bespoke onsite courses run from 9:30am to 4:30pm with an hour for lunch. The trainer will arrive in time to check and help with your set up. If you need to amend these timings just let us know in advance and we will work around what suits you.

#### Day 2

# **Using Context Manipulation Functions**

Understanding row context, Understanding filter context, The SUMX function, The ALL function, The FILTER function, The CALCULATE function

#### **Using Table Functions**

The COUNTROWS function, The DISTINCT function Using Time Intelligence Functions
Creating a date table, The TOTALYTD function

#### **Geo Visualizations**

Using maps with geographical data

#### **Analytics**

Adding trendlines, Ading reference lines

# **Using Custom Visuals**

Obtaining custom visuals, Chiclet Slicer, Hierarchy Slicer, Pulse Chart, Synoptic Panel by SQLBI

## **Creating Reports and Dashboards**

Creating multipage reports, Publishing Power BI Desktop reports, Creating dashboards, Printing and exporting dashboards and reports, Getting Quick Insights

#### **Publishing content**

Creating Groups in the Power BI service, Creating content Packs, Assigning groups to content packs, Sharing dashboards with your organization, Publishing reports to the web, Embedding a report in a web page, Embedding a report in a SharePoint page

# Consuming and customizing content

Browsing group content, Using content packs, Creating read-only versions, Querying with natural language, Creating custom Q & A suggestions

# Refreshing content

Setting up a personal gateway, Customizing dataset refresh settings, Scheduling a refresh frequency, Setting up enterprise gateways, Managing enterprise gateways, Adding and removing data sources, Creating live connections to data, Using row level security

#### Discuss your own projects

Discussion of reports and visualizations currently being worked on by yourself and your colleagues

