Power BI Reports and Dashboards

Duration: 2 Days

Who should attend:
This course's audience is data and business professionals who need to learn how to build Power BI reports to present data using a tabular model and insightful visualisations telling a dynamic data story to share with others in your organisation and online.

Experience Power BI Desktop and Power BI Service in action. Watch and perform exercises to connect to 7 million records from various sources, refine the data in Power Query and import the tables into Power BI. Organise and model your data to "slice and dice" summary information. Implement insightful, dynamic data visualisations. Publish your report to Power BI Service. Add a workspace and an app to distribute your report and share it with others.

Pre-requisites:
Delegates should have attended our **Introduction to Power BI** training course or have equivalent knowledge.

Content
Module 1: Accessing & Preparing the Data
Connect to multiple data sources and prepare the data for reporting
Connect to multiple data sources
- View original data in Excel
- Connect to a CSV file in Power BI
- Connect to an Excel file from Power Query
- Connect to a file folder and combine CSV files from Power Query

Lab: Connect to multiple data sources
Adjust and Prepare Data in Power Query
- Overview Power Query Interface
- Rename Tables
- Fill in missing data
- Split Columns by Delimiter
- Add a column with Columns by Examples
- Change Data Types
- Remove top or bottom rows
- Transpose a table
- Append Data to bring two tables together
- Filter rows

Lab: Connect to multiple data sources

Module 2: Data Modelling and Exploration
Explore the data with visuals and build a data model enhanced by calculations.
- Overview of Power BI Views
- Implement Visuals
- Insert and configure visuals
- Show data as tables

Model Data
- Overview of relationship types
- Relate tables in the Model View
- Add a calculated column to handle many to many relationships.

Lab: Data Modeling and Exploration

Explore the data with Filters
- Examine Top N Filter with visuals
- Leverage custom groups in visuals
- Filter the page with values from a custom group
- Implement a slicer to filter the page

Examining data with Hierarchies and Cross Filtering
- Discover insights with automatic Date Hierarchies
- Add custom Hierarchy groups
- Explore Cross Filtering Visuals
- Edit interactions between Visuals

Lab: Edit Interactions, Slicers, and Hierarchies

Enhance the Data Model with a Date Table
- Implement a date table for time intelligence formulas
- Relate the Date table to the sales table
- Adjust Hierarchies to use the date table
- Hide key fields not used in reporting

Refine the data model with Measures
- Change the formula used in an implicit measure – Show Values as
- Design an explicit measure
- Find out the total from last year with CALCULATE and SAMEPERIODLASTYEAR Functions
- Add a per cent change measure using the DIVIDE Function

Lab: Date Calendars and DAX formulas

Module 3: Visualizations

Tell the data story, format visuals to gain insights into the data, and publish the report to Power BI Service.

Visualise and format visuals to present insights
- Conditional Formatting

Return to Power Query to make changes and refresh data

Arrange visuals to tell the Data story
- Format slicers with URL images
- Apply a combo clustered column chart to show the variation of time and comparison between dates
- Add a Gauge visual to show Total Revenue vs Last Year's sales

Lab: Format Visuals and Update Data

Finishing Touches
- Discover themes to change the look of a report
- Import a custom corporate theme
- Refine the page background with a jpg graphic
- Add a Title and Logo

- Find an automated slicer from AppSource

Lab: Finishing Touches

Publish Online

Module 4: Visualizations

Implement a dashboard online. Define a custom workspace to store, share and collaborate on reports.

Define terminology and explore Dashboard designs to handle multiple reports

- Tour of Online Menus and Workspaces
- Add a custom Workspace
- Publish reports to the Workspace

Implement a Dashboard to access more than one report

- Pin report items to a Dashboard
- Configure the Dashboard for a Web page
- Configure the Dashboard for the Phone

Lab: Dashboards

Publish Workspace to an App

Lab: Create an App