

Building Analytical Dashboards with Power BI

Instructor-led Hands on Training

Level:

300

Description

Power BI is an innovative solution, which helps business decision making. It is formed by a set of tools that allow to obtain data from many sources, integrate and convert them into information to be analyzed and shared through excellent visualization and collaboration tools. It allows you to focus on what really matters and avoid tedious and repetitive tasks.

Course Coverage

By the end of this course, you will have practiced how to **Get Data**, **Model** your data, **Visualize** your data, and **Share** your data with Power BI Desktop and the Power BI Service.

The fundamental objective of this training is to provide students with the necessary knowledge for data integration and advanced analysis on information using Power BI. All this, based on practical cases of diverse business areas, allowing the student to apply all of them in their workplace. Once the course is completed, the student will be able to

- Create Power BI solutions and apply them in their company
- Import data from heterogeneous sources (Excel, Access, ERP systems, websites, online services, social media, etc.)
- Design, refine and optimize data models
- Create analytical calculations using DAX
- Leverage the model and the analytical information to create reports and dashboards
- Share them within the organization
- Take decisions anytime, anywhere

Intended Audience

This course was built and is intended for experienced business analysts & data analysts who have prior experience in other data visualization tools like Tableau, QlikView, Power Pivot & Power View, etc... and want to learn how to build a similar level of compelling, robust visualizations in Power BI.

What do you need to know before attending?

Before attending you should have experience working with pivot tables, a reporting tool like Tableau, QlikView, Power Pivot & Power View, etc... and have at least installed the Power BI Desktop client.

Day 1

Introduction to the Power BI ecosystem

- Power BI service at PowerBI.com
- Power BI Desktop
- Power BI Mobile
- Power BI Embedded
- Power BI Report Server

Introduction to Power BI Desktop

Quickly showing the end-to-end of how to Get Data, Model, & Visualize your data.

Get Data: Gathering and Cleansing

- Query Editor
- Data Sources
- Querying data
- Other features
- Practical cases

Modeling: Introduction-Fundamentals of Data Modeling

- Data types
- Model design
- Modeling time
- Practical cases

Visualize: Introduction to Visuals & chart interaction

- Introduction to Power BI Reports
- Visual elements
- Creating reports
- Practical cases

Lab 1: Building Basic Data Visualizations

Students will leverage the skills they learned in the previous section to quickly walk through a step-by-step lab that will have them Get, Model, & Visualize data on their own machine.

Modeling: Introduction to DAX and Quick Measures

- What is DAX and why we need it
- Calculated columns and measures
- DAX functions (part I)
- Practical cases

Visualize: Conditional Formatting Options

- Conditional formatting with the default visuals
- Custom visuals tailor-made for conditional formatting

Share: Publishing to the Power BI Service

- Publishing Reports
- Building Dashboards
- Sharing Dashboards

Lab 2: Building & Sharing Better Visualizations

In this final lab for the day students will use a completed Power BI Desktop file from the previous lab as a starting point to build more intricate and more robust visualizations. They will then publish these visualizations to the Power BI Service and create a Power BI Dashboard with data & visualizations from the multiple report pages they have built.

Day 2

Share: Creating and Managing Workspaces

- Personal workspace
- Group workspace

Modeling: Connecting On-Premises Data to the Power BI Service

- Power BI Gateway Part 1

Get Data: Advanced Data Cleansing Features

- Get Data Part 3

Lab 3: Building Reports & Dashboards

Students will use multiple data assets to build dashboards across multiple focus areas.

Modeling: Intermediate DAX Calculations

- Overview of different types of functions
- Aggregation and relationship functions
- Implementing calculations, measures, and KPIs
- Practical cases

Get Data: Working with Data for Power BI Report Server

- Moving your data assets into SSAS Tabular
- Approaches
- Available shortcuts

Share: Deploying Reports to Power BI Report Server

- Publishing, Securing, & Sharing
- Cross-Linking
- Editing

Lab 4: Collaborating on Shared Reports, Datasets, & Models

Students will step through how to share and collaborate on dashboards; as well as options for sharing only the portions they want others to be able to manipulate.

Day 3

Visualize: Custom Visuals

The default visuals that come with Power BI Desktop are very useful, but there are many custom visuals available to help fit specific situations.

Visualize: Advanced Visualization Techniques

- New analytical features

Visualize: Advanced Visuals with R

- Bringing Data Science into your Power BI reports

Visualize: Designing for Mobility

- Design considerations
- Features & options

Lab 5: Beautiful Visualizations

Students will walk through taking the visuals they have already created and applying custom visuals, custom filters, and some visual design best practices to produce reports & dashboards that are eye-popping.

Share: PowerBI.com Administration

- The need to share
- The Power BI Service
- Practical cases

Share: Combining Power BI Report Server with SSRS Report Data

- Connecting the services

Lab 6: Making Sure Your Coworkers Can Use What You Built

This final lab will step students through applying the advanced features.