

# DATA MODELING

For Power BI

## Data Modeling for Power BI

A WORKSHOP BY SQLBI

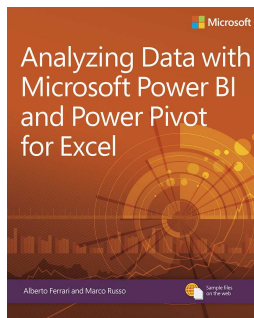
This **three-day** workshop is a practical introduction to the concepts of data modeling for Power BI, Analysis Services Tabular, and Power Pivot. The training is aimed at users of **Power BI Desktop** or **Power Pivot for Excel**, and at **Analysis Services** developers who want to learn how to build the optimal data model for their reporting needs. The goal of the course is to teach through examples of increasing complexity how to solve business scenarios by adapting the data model, so that the required DAX code becomes easier, faster and more robust.

*Leverage the full potential of  
Power BI and SSAS models.*

### Prerequisites

To get the most out of the workshop, attendees should have prior experience building analytical models with Power BI, Excel, Analysis Services, or other tools. DAX knowledge is welcome and may improve the workshop experience, although it is not strictly required.

## Training material



All attendees will receive a copy of the book **Analyzing Data with Power BI and Power Pivot for Excel** written by our trainers, Marco Russo and Alberto Ferrari.

Together with the book, each attendee will receive:

- The course slides in PDF format
- All demo files used in the course
- The walk-through exercises

## Goals of the training

- Understanding the importance of using the correct data model for your specific scenario
- Learning how changing the data model makes the code easier and safer
- Learning the basics of dimensional modeling and recognizing common patterns
- Practicing your skills through hands-on lab sessions assisted by our trainer

## Course outline

- Introduction to data modeling
  - Basic modeling techniques
  - Dimensional modeling
  - Snowflakes and complex models
- Using header / detail tables
  - Order and order details
- Data models with multiple fact tables
  - Sales and purchases
- Working with date and time
  - Aggregations and comparisons
  - Working days calculations
  - Handling special time periods
  - Week-based calendars
- Tracking historical attributes
  - Slowly changing dimensions
  - Rapidly changing dimensions
- Analyzing date, time and intervals
  - Events with a duration
- Using many-to-many relationships
- Managing tables with different granularities

## Hands-on Lab sessions

**Bring your own notebook** to run hands-on lab sessions facilitated by our teachers. We provide a detailed setup guide and exercise files so that you can prepare your computer in advance. You will need a recent version (no older than 3 months) of Power BI Desktop installed on your notebook. You will receive the setup notes two weeks before the course.

## Public open workshops

**We offer a public schedule of open classes**, where we welcome individual registrations of participants from different companies and backgrounds. In this case, we will follow the default course program with all the examples, based on the standard Contoso database along with other examples provided by us.

You can find all available dates and locations at [www.sqlbi.com/training](http://www.sqlbi.com/training).

## Private classes

**We offer private versions of this workshop to participants from a same company.** In this case, we can either follow the standard course or, if required and upon previous agreement, we can extend the course to discussing specific issues of the customer's databases.

Contact us at [info@sqlbi.com](mailto:info@sqlbi.com) to arrange private classes.

**Register today at [www.sqlbi.com/training](http://www.sqlbi.com/training)**

## About the trainers



Marco and Alberto have worked with Analysis Services, Power BI and Power Pivot since the first versions, becoming recognized experts. They have written 10 books on these technologies and they provide consultancy and mentoring.

Marco and Alberto are also regular speakers at major international BI conferences, including Microsoft Ignite, Data Insight Summit, PASS Summit, and SQLBits.

And of course, they are qualified trainers, with more than 250 classes taught so far.

**Marco Russo** and **Alberto Ferrari** are the founders of SQLBI, where they regularly publish articles about Microsoft Power BI, DAX, Power Pivot, and SQL Server Analysis Services.



*SQLBI is a Microsoft Gold Partner in Business Intelligence. The founders, Marco and Alberto, have achieved several Microsoft certifications including the exclusive SSAS Maestro certification.*