Power BI: Advanced

Hands-on course of 2 days - 14h
Ref.: BIG - Price 2025: 1 480 (excl. taxes)

EDUCATIONAL OBJECTIVES
At the end of the training, the trainee will be able to:

Use the language M to create optimized data models

Design sophisticated measures with the language DAX

Create complex reports with Power BI Desktop

Create a presentation and scenario tailored to your message.

TEACHING METHODS

Combination of lectures and hands-on work.

THE PROGRAMME

last updated: 04/2024

1) Overview, refreshers, and best practices
- Refresher on the design cycle of a Power BI report.
- Connecting and preparing data.
- Understanding the structure of a star schema, fact tables, and dimension tables.
- Expression of need and identifying sources of data.
- Organizing tables and relationships, defining measures, visualization.

2) Using queries to design an appropriate model
- Merging requests to reduce snowflakes.
- Aggregating and stacking sources.
- Importing data from a list of sources.
- Customizing functions and passing parameters in M.
- Managing errors.

Hands-on work : Designing a single table from multiple queries. Importing a set of workbooks and files in batches. Designing a function for cleaning up text.

3) Working with the Time dimension
- Using variables in DAX to produce a calendar, lists, and functions to produce a calendar in M.
- Cumulative sum by period. Comparing periods. Cumulative sum over sliding periods.
- Using Time Intelligence functions to create period comparisons, cumulative sums, and sliding periods.
- Using the functions: DATEADD, DATESYTD, DATESBETWEEN, DATESINPERIOD, CLOSINGBALANCE.
- Working with multiple date columns and double relationships with USERELATIONSHIP.
- Filtering data over the current period.

Hands-on work : Creating a calendar table incorporating paid holidays. Measuring progress. Doing a cumulative sum over 12 sliding months.

4) Using advanced DAX functions
- Calculating a cumulative sum with the EARLIER function.
- The CALCULATE function with multiple conditions and the FILTER function.
- The function of managing blank values: ISBLANK.

- DAX table creation functions: FILTER, CALCULATETABLE, ADDCOLUMNS, SUMMURIZE, UNION, etc.

Hands-on work : Taking advanced measurements. Creating cumulative sum and sorting columns. Filtering sorted columns. Working with tables in memory.

5) Display, navigation, and visualizations

- Creating a background, a theme, a report template.
- Using bookmarks for navigation and storytelling.
- Representing with images. Preparing dynamic comments and customizing tooltips.
- Defining a personalized visual with the Synoptic Panel.
- Creating Master Detail reports using drillthrough filters.
- Using the filter pane and selection pane.

Hands-on work : Defining a graphical identity and incorporating it into a report template. Setting up navigation and exploration tools. Presenting a scenario.

DATES

REMOTE CLASS
2025 : 21 août, 13 nov.