Excel Power Pivot Data Modeling and DAX Course

3 – 7 May 2027
Zoom

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Ref: 860_164997 **Date:** 3 – 7 May 2027 **Location:** Zoom **Fees:** 1500 Euro

Overview

Excel Power Pivot Data Modeling and DAX Course is a one-week course for Excel analysts, finance professionals, reporting specialists, and business users who leave with a Reusable Analytical Workbook. Participants import multiple tables, define relationships, create calculated columns and measures, apply row and filter context, build PivotTables and PivotCharts, analyze reporting periods, validate results, and refresh sources. The course replaces fragile lookup chains with a structured Excel Data Model and calculation layer. Agile Leaders Training Center develops Excel Power Pivot modeling and DAX practice.

Who Should Attend

- Finance analysis functions responsible for recurring management calculations and reporting workbooks
- Reporting functions responsible for combining multiple source tables into repeatable outputs
- Business analysis functions responsible for defining measures and comparing performance periods
- Operations functions responsible for maintaining analytical workbooks and source refreshes
- Excel support functions responsible for improving workbook structure, validation, and reuse

The course assumes participants can use Excel tables, formulas, PivotTables, and basic data cleaning; it leaves out Power BI report design, database engineering, macros, and advanced DAX optimization.

Departments and Industries

The course supports departments and industries that analyze related business tables inside Excel.

- Finance, sales, procurement, operations, and human resources
- Retail, logistics, manufacturing, and hospitality
- Healthcare, education, utilities, and infrastructure
- Technology, telecommunications, financial services, and professional services

Learning Objectives

By the end of this course, participants will be able to:

- Use Power Pivot to import and organize multiple source tables.
- Build valid one-to-many relationships in an Excel Data Model.
- Apply DAX calculated columns, measures, and context choices.
- Analyze model results with PivotTables and PivotCharts.
- Diagnose relationship, calculation, and reconciliation errors.
- Build a reusable workbook with refresh and validation controls.

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Course Agenda

Day 1: Structure the Analytical Workbook

- Workbook Question and Output Definition Canvas
- Power Pivot Window and Data Model Map
- Source Table and Field Inventory
- Import, Rename, and Data Type Checklist
- Analytical Workbook File and Version Structure

Day 2: Design Table Relationships

- Fact and Lookup Table Classification
- Primary Key and Matching Column Test
- Diagram View Relationship Construction
- Cardinality, Direction, and Ambiguity Check
- Relationship Validation through PivotTable Fields

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Day 3: Calculate with DAX

- Calculated Column and Measure Decision Guide
- SUM, COUNT, DISTINCTCOUNT, and DIVIDE Measure Pattern
- Row Context and Filter Context Demonstration
- Date Table and Time Comparison Structure
- DAX Measure Definition and Test Record

Day 4: Report and Control Results

- PivotTable Field Layout and Slicer Design
- PivotChart Selection and Formatting Grid
- Period, Segment, and Variance Analysis View
- Source-to-Measure Reconciliation Sheet
- Refresh Sequence and Workbook Control Log

Day 5: Practice Workbook Delivery

- Exercise: Repair a Broken Table Relationship
- Exercise: Diagnose DAX Context and Totals
- Exercise: Assemble a PivotTable Analysis View
- Exercise: Test Refresh and Reconciliation Controls
- Capstone: Reusable Analytical Workbook

Practical Exercises

The course uses suggested activities based on finance, sales, workforce, and operational tables.

- Suggested activity: classify imported tables, identify keys, create relationships, and test model behavior through a PivotTable.
- Suggested activity: build calculated columns and measures, then compare row and filter context effects.
- Suggested activity: design a period analysis with PivotTables, PivotCharts, slicers, and time comparisons.
- Suggested activity: reconcile model results to sources and document refresh, version, and ownership controls.

FAQs

Who suits Excel Power Pivot and DAX training, and what does it assume?

Excel analysts, finance teams, reporting functions, and business users suit the training. It assumes experience with Excel tables, formulas, PivotTables, and basic data cleaning.

How does Excel Power Pivot modeling differ from Power BI reporting?

Power Pivot modeling centers on Excel workbooks, related tables, DAX measures, PivotTables, and PivotCharts, while Power BI reporting adds dedicated report pages, service workspaces, broader sharing controls, and interactive application delivery.

Why are relationships important in an Excel Power Pivot Data Model?

Relationships let fields from separate tables work together without repeating all columns in one table, while keys and cardinality determine valid calculation and navigation paths.

When should Excel Power Pivot use a DAX measure instead of a calculated column?

A measure suits calculations that should respond to PivotTable filters and context, while a calculated column stores a value for each model row and can support grouping, filtering, or later calculations.

How should Power Pivot workbook results be validated?

Results should be checked through source totals, row counts, relationship tests, filter combinations, period comparisons, exception cases, measure definitions, and a recorded refresh sequence.

Conclusion

Participants take back a Reusable Analytical Workbook containing related tables, DAX calculations, PivotTable views, PivotCharts, reconciliations, and refresh controls. It changes disconnected Excel extracts into a structured model and reporting asset. The workbook supports consistent calculations, repeatable analysis, source validation, and controlled maintenance.