



Power BI DAX

TRAINING

Your key to advanced data calculations



Facilitated by
NICKY BULL
Corporate Consultant
Blue Chameleon

Online → 30 & 31 October 2024



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Overview

DAX (Data Analysis Expressions) is the calculation language of Power BI. DAX enriches existing data, enabling you to perform sophisticated data analysis. It has the power to unlock insights that would not be possible by just dragging values into visuals.

This course will enable participants to enhance existing data models and perform advanced data analysis. Mastering DAX will allow participants to uncover insights and trends that are not easily accessible through basic data manipulation. The course covers a wide range of topics from the basics of DAX to advanced filtering and time series intelligence, ensuring a thorough grasp of DAX functionality.

Participants will also learn to use DAX tools like DAX Studio and DAX Formatter to debug and optimize their queries, making their Power BI reports more efficient and effective. The skills gained from this course will empower attendees to leverage the full power of DAX, making their data analysis more robust and insightful, ultimately leading to better data-driven decisions.

Why Attend

- Uncover insights that basic data manipulation cannot reveal
- Build more efficient and effective data models using calculated columns, measures, and advanced filtering techniques
- Gain skills to create more informative and visually appealing Power BI reports that provide significant value to stakeholders
- Streamline the development process and improve the performance of your Power BI solutions
- Gain a crucial skill for advanced data analysis in Power BI

Learning Objectives

- **Understand the syntax and wide range of functions in DAX:** Enable the creation of complex calculations and analytical expressions to enhance data insights
- **Optimise data models and reporting capabilities in Power BI:** Learn when and how to use calculated columns versus measures
- **Manipulate data context and refine analysis:** Develop skills to use advanced filtering functions CALCULATE, FILTER, and KEEPFILTERS
- **Perform sophisticated time series analyses:** Including year-over-year comparisons, running totals, and period-based calculations to track trends and performance over time
- **Utilise DAX tools like DAX Studio and DAX Formatter:** To debug, format, and optimise DAX queries for better performance and maintainability

Who Should Attend

- Advanced Excel users who create reports
- Data and Business Analysts
- Professionals from diverse backgrounds who require advanced data analysis skills in their roles
- Local Data Gurus
- All corners of government - Federal, State & Local

Meet the Trainer



NICKY BULL

Corporate Consultant
Blue Chameleon

Nicky Bull is a dynamic corporate trainer and consultant. She has 15 years of commercial experience as a computer programmer and analyst, and over ten years designing and delivering a range of educational programs. She lectures accounting students at Macquarie University and creator of the highly acclaimed Excel for Data Analytics Specialisation on the Coursera platform.

Nicky is passionate about learning and enabling people to use technology confidently and effectively in their workplace. She holds a BSc Hons in Computer Science, a BA in English Literature, and a Postgraduate Certificate in Education.

What your peers are saying about PSN's Power BI courses

“The course included simple tips and tricks that will make it easier for me to build reports more efficiently and without errors.”

“It covered a lot of territory in a short time but was exactly at the level I needed.”

“The presenter allowed plenty of time for questions and ensured people kept up.”

“Nicky Bull was an excellent trainer who explained the course material well.”

“Good theory and application.”

Preparation

This workshop is highly interactive with practical hands-on workshops throughout. Come prepared with some current challenges you face in your dashboards.

To participate you'll need:

- A computer with camera and microphone
- Attendees must have the (free) Power BI Desktop app installed
- Strong internet connection
- Quiet, well-lit space



*Group Discounts Available - Contact Registration at training@publicsector.academy or Call on **(02) 9057 9070**

Explore the Agenda

DAY 1 | Wednesday, 30 October 2024, 09:00am - 12:30pm AEST

9:00am Welcome and Opening Remarks

9:15am What is DAX

- DAX and the data model
 - Star Schema & Relationship Cardinality
 - Columnar storage and the Power BI Engines
-

9:45am Working with DAX functions

- Data types & Operators
 - Creating a Fiscal Calendar
 - Variables and Comments
 - Date Functions & Text Functions
 - Logical Functions (IF & SWITCH)
-

10:40am Break

11:00am Calculated Columns vs Measures

- Evaluation Context
 - Organising Measures in a measures table
 - Testing Measures
-

11:30am Aggregators and Iterators

- SUM vs SUMX
 - RELATED and RELATEDTABLE
 - AVERAGEX
 - CONCATENATEX
-

12:20pm Reflections and closing remarks

12:30pm End of day 1

DAY 2 | Thursday 31 October 2024, 09:00am - 12:30pm AEST

9:00am Welcome and Recap

9:10am DAX Tools for troubleshooting and error handling

- Error Handlers (ISERROR, IFERROR)
 - Working with Query View / DAX Studio
 - EVALUATE and DEFINE MEASURE
-

9:40am DAX Tools for troubleshooting and error handling

- VALUES, ALL & ALLEXECPT
 - SUMMARISE & SUMMARISECOLUMNS
 - FILTER
-

10:10am Modifying filter context with CALCULATE

- Understanding CALCULATE
 - Applying multiple filter criteria
 - Context Transition
-

10:40am Break

11:00am CALCULATE Modifiers

- KEEPFILTERS
 - ALL & REMOVEFILTERS
 - Calculation Sequence
 - Activating inactive relationships (USERELATIONSHIP)
-

11:50am Time Series Intelligence

- Running Totals with TOTALYTD & DATESYTD
 - Year-on-Year / Month-on-Month Comparisons
-

12:20pm Reflections and final questions

12:30pm End of Day 2



Get In Contact

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