

Introduction to DAX in Power BI

Argument: A value, column, expression, or reference passed into a function to control its behavior or provide data for calculation

CALCULATE: A core DAX function that evaluates an expression in a modified filter context by applying one or more filter arguments, and whose internal filters override filters from visuals

Calculated column: A column added to a table whose values are computed row-by-row by a DAX expression and evaluated at data load or refresh

CALENDAR: A DAX function that generates a single-column table of dates between a specified start and end date, inclusive

CALENDARAUTO: A DAX function that automatically generates a date table by detecting the model's earliest and latest dates and optionally extending to a specified fiscal year end month

Date hierarchy: A built-in or created hierarchical structure (e.g., Year → Quarter → Month → Day) that allows users to drill down or up through time levels in visuals

Date table (dedicated date table): A standalone table containing a continuous sequence of dates (no gaps) and related date attributes, recommended for accurate time-intelligence calculations and flexible date analysis

Discrete field: A field treated as separate, individual values (displayed in blue in Tableau) that typically creates headers, labels, or distinct categories

Forecast Sheet: An Excel wizard that automatically creates a time-series forecast and chart (including confidence intervals) using exponential smoothing algorithms and detected seasonality

FORMAT (function): A DAX function that converts a value (like a date or number) to text using a specified format string, allowing custom display of dates, times, and numbers

Function (DAX): A predefined formula in DAX that performs a specific calculation or operation and expects one or more inputs called arguments following a defined syntax

Iterator function: A DAX function that loops over each row of a table to evaluate an expression per row (often identifiable by an X suffix, e.g., SUMX)

Measure: A DAX expression that aggregates or computes values over multiple rows, is evaluated at query time, and returns a single value that can be used in visualizations

Power BI: A Microsoft data visualization and business intelligence tool that lets you model data, create relationships, build reports, and use DAX for custom calculations

Quick Measure: A Power BI feature that builds complex DAX calculations through a guided drag-and-drop interface and generates the underlying DAX code automatically

Relationship (between tables): A defined link between two tables based on matching key columns that enables filtering and aggregation across related tables in the data model

Row context: The context representing the current row in a table, which provides access to that row's column values when evaluating expressions like those in calculated columns

SUMX: An iterator DAX function that takes a table and an expression, evaluates the expression for each row of the table, and returns the sum of those results

Time-intelligence functions: A group of DAX functions designed to perform period-based calculations such as year-to-date, month-over-month, and rolling-period aggregations

Variable (VAR/RETURN): A named temporary value declared inside a DAX expression using VAR and returned with RETURN, used to simplify code, avoid repeated calculations, and improve readability and performance