

Seven Terms

you need to know when learning Power BI

One of the barriers to learning Power BI is the prevalence of terminology drawn from the database world. But these terms don't have to stand in your way. Here's a short explanation of seven key terms that may have mystified you.

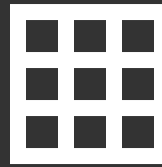
1. Data Model

The data model is the structure you create to combine data from different sources. The preferred structure for a data model in Power BI is called a 'star schema'. Star schemas are created by connecting two types of tables: fact and dimension.



2. Fact and Dim Tables

In a star schema, there are two types of tables. The 'central' fact table contains the facts that you are reporting on. There are then several or many dimension ('dim') tables, each of which describe the facts in greater detail. A star schema typically has one fact table and multiple dimension tables.



3. Keys

Every table will have a field that assigns a unique identifier for individual values. (There can be more than one key column.) These columns usually include the word 'key' in their name. A key column will always have high cardinality.



4. Cardinality

Cardinality measures how many unique values are present in a column. The higher the number of unique values, the higher the cardinality. High cardinality columns 'cost' more to store so reducing cardinality is always advisable. Selecting the correct data type is very important.



5. Granularity

If you want to report on data by day, you must collect data at the day level. Granularity describes the level to which you can accurately report. Always collect data at the *lowest* level of detail that you may ever need. You can always aggregate upwards.



6. Aggregation

Rolling up data is called 'aggregation'. So you can combine hourly data into daily data, or daily data into weekly data. You can aggregate product sales into category sales.



7. Data Type

Each column in a table is assigned a data type (for example 'whole number' or 'text'). The data type determines how that column is stored. Number data types (whole number, decimal number, date) store data more efficiently.

