Exercise 2 – Power BI Data Modelling

Objective

Effectively use the data view in Power BI.

Briefing

The main goal for this lab is to explore and update the Excel data that was imported into the Power BI file during Lab1.

Files

- Use the report that contains the completed Lab1 exercise.

Steps

- In Power BI, make sure you are looking at the solution report from Exercise 1.
- View the Directory Table in Data View (click the "data" view on the left hand ribbon).
- On the Directory table, rename the "Phone Number" column to "Director's Number"
- Ensure each column has the correct data category applied (if applicable)
- Click the "model" view in the left-hand nav ribon. Link the region field in the Directory table to the region field in the BU table. You may have to zoom out or pan to find the Directory table. To create the relationship click "Manage Relationships" in the top menubar.
- When looking at the list of relationships, click "New". Select the "Directory" table in the first dropdown, then select the "Region" column. Similarly, in the second dropdown select the BU table and select the "Region" column. PowerBI should autodetect the details of the connection. Then click Ok.
- Notice how the model screen now shows the new relationship.
- In the Data screen ,add a column to the BU table to show which director each VP reports to
    - Select the BU table
    - Click "New Column"
    - You can use this DAX to create the required new column:
        - `Director = LOOKUPVALUE(Directory[Last Name], Directory[Region], BU[Region])`

- In the Data screen, add a measure to calculate the average tenure in years
  - Add this to the Employee table, so in the data view select Employee.
  - Click "New Measure" and calculate the required value from an existing measure:
    - AVG Tenure Years = ROUND([AVG Tenure Months]/12, 2)
- In the Report view add a card visualisation to the "New Hires Report", showing the avg tenure in years for the currently selected data.
  - Notice how the value on the card changes as different sets of data are selected in the other visualisations.