

TRANSFORM DATA (POWER QUERY)

- Choose the right data connector. e.g., Azure SQL database, Google Analytics, MySQL database, Text/CSV, etc.
- Check if the query is used – if not used then disable query load. Decide whether to load the query immediately upon completion or manually control when to load it into your workbook.
- Parallel execution Query load. Execute multiple queries simultaneously, and improve data loading and transformation efficiency. Options > Current File > Data Load > By Default it is disabled if required enable the setting.
- Create a parameter to dynamically select or modify the data source connection, especially useful when dealing with various servers / various environments (DEV\UAT\PROD).
- Filter the data early to focus better on your task at hand by only showing data that are relevant in the data preview section.
- If using multiple data sources, Perform a power query to merge or append data to optimize performance and streamline data modeling. Also, reduce the size of the data load and model.
- Check the steps of the Power query and optimize it for query folding at the data source.
- If Power Query is taking time – check the possibility of adding a buffer.
- Perform column renames best suitable for business. SalesAmt → Amount
- Make sure that data, table, and column names are kept simple and understandable. For the Employee table use this column names Employee_ID, First_Name, Last_name, Department, Salary, etc.
- If any column is not required remove it or ignore it to reduce clutter and focus on relevant data.
- Set appropriate data types for each column to ensure accurate data interpretation and effective application of transformations that lead to optimized storage and modeling in Power BI.
- Check the column quality using data profiling tools. Assess data quality using built-in tools in Power Query to identify issues such as missing values, Error, Valid, Empty, and Unknown.



- Remove duplicates and handle null values for the dimension table. If we have a numeric column then replace the value with an average.
- Limit data using dynamic Parameters or date parameter filters. e.g., a date parameter filter set up in power bi that allows users to select a specific Date, Year, or Week to dynamically filter the data in your report.
- Avoid repetition of codes and use reusable code in the function.
- Use the MissingField.Ignore function. You can also explicitly tell Power Query to ignore any missing columns.
- Document your queries by renaming or adding a description to your steps.
- To keep your work organized, leverage the use of groups in the queries pane.

