

Steps in building the reports:

ETL:

ETL stands for extract, transform, load. It refers to the process of extracting data from various sources, transforming the data to fit into the desired data model or format and loading the data into a target data store or destination.

Power query:

A sales.csv file is extracted into the excel and transformed by power query. the transformed file is loaded into excel into different sheet.

Power query transforms and connects data from different sources, such as databases and spreadsheets into a format suitable for analysis & reporting.

Data cleaning in power query:

Data cleaning in power query involves the process of identifying and correcting inaccuracies, inconsistencies, and errors in data to ensure that it is accurate and usable for analysis and reporting.

Giving proper names to the power query steps can make your queries more organised and easier to understand.

Building a blueprint for the report and listing down the required components to frame the dashboard.

Data modelling:

As the report needs region, country, division, net sales, customer, year, which are in different tables, with data modelling in power query we connect the tables and relate the specified columns into the fact_sales_monthly_table(fact table).

Data modelling involves the process of connecting different data sets together by establishing relationships between them.

The star schema is a data modelling technique that arranges data into a central fact table surrounded by several dimension tables.

DAX formulas:

Then with the power query, fiscal year column is built using DAX formulas, which helps to change data dynamically without any breakdowns. the calculate () function applies filter as per the requirement.

Pivot table/power pivot:

The pivot table is a powerful tool that allows you to summarize and large amounts of data dynamically.

For customer performance report(report1), pivot tables are loaded into excel for analysis of net sales and customer.

For market performance report(report2), the difference between actuals vs target, actuals vs target % is calculated using DAX.

User empathetic reports:

And data is loaded into excel as pivot tables.

After all the required components are formed, user empathetic reports are built by using conditional formatting. key values are highlighted so that the report is readable, simple, and intuitive.