

Sales Analytics

Skills: ETL, Data Cleaning, Data Modeling, Power Query, Pivot Tables, Functional Sales Knowledge

Reports:

1. Customer Performance
2. Market vs Targets

! Note: Due to copyright restrictions, I am unable to share the dataset within this platform. However, I'll provide a detailed, step-by-step description of the processes involved in generating this report.

▼ Step-1: ETL (Extraction, Transformation and Load)

- Download the required dataset in CSV format.
- Extract the Data into Excel's Power Query
 - Data → Get External Data → From Text/CSV file (load individual files) [or load entire folder]
- Transform the loaded data.
 - make references of each individual table and ensure the column headers are correctly extracted.
 - Perform Data Cleaning in all tables.
 - ensure there are no duplicate entries/missing values.
 - ensure data consistency (spelling errors etc.,)
 - check for any value errors in the data and correct them.

[rename the applied steps titles in power query, to be helpful for reuse of the report]

- Load the data into excel.
 - load only as connections and add data to data model.
 - power pivot → manage - gives all tables in the power window.

▼ Step-2: Report Solution Design

- Have an understanding how the report should look like
 - have a sample template for reference.
- List the components (values and measures) required to build the report.
 - In report 1, they are: Net Sales, Country, Division, Region, Year
 - Create calendar/date table to extract the year in Power Query
- Map the components to their corresponding tables in which the data is available.

▼ Step-3: Data Modelling

- Do Data Modelling (connect the tables)
 - Power Pivot → Manage → Diagram View (enable power pivot to access)
 - Use STAR schema - place fact table in the center and dimension tables around it.
 - Connect the tables using primary and foreign keys
 - Dimension tables that lack a direct connection to the fact table can be linked through another dimension table that is directly connected to the fact table.
 - Ensure proper connections are made by verifying the data in tables.
 - Example: use RELATE() function in excel to verify

▼ Step-4: Functional Sales Knowledge

- Get a basic understanding of the business sales knowledge.

- Difference between calendar and fiscal years
- why and where the sales reports will be used?
- How the report helps the senior management and stakeholders to make decisions?

▼ Step-5: Report 1 - Customer Performance

- Insert Pivot Tables
 - Insert → Pivot Table → From Data Model
- Add values in their corresponding sections as per the report reference template.
- Calculate Percentage Growth: $X \text{ vs } Y \rightarrow X/Y$
- Use DAX measures to create new columns like percentage growth.
 - Power Pivot → Measures → New Measure → Use CALCULATE () function.
- Design the report using conditional formatting or other options like inserting elements to make the report readable and impactful.

▼ Step-6: Report 2 - Market vs Target

- Repeat the steps from Step-5 (Excluding 3rd step)
 - The target values are obtained from the target table.