Case 1: Sales Analysis for a Retail Chain

Scenario:

A retail chain wants to analyze its sales data to make informed decisions. They have provided data on sales, products, customers, and regions.

Tasks:

- 1. Load the sales dataset into Power BI.
- 2. Clean and transform the data by removing null or erroneous entries.
- 3. Create relationships between tables (e.g., Sales, Products, Customers, Regions).
- 4. Create a sales trend line for the past 12 months.
- 5. Generate a bar chart showing top 10 products by revenue.
- 6. Create a map visualization of sales by region.
- 7. Develop a pie chart of sales distribution across product categories.
- 8. Use DAX to calculate the total sales and total profit for each product.
- 9. Build a slicer to filter data by year and quarter.
- 10. Create a KPI card to display total revenue, profit margin, and customer count.
- 11. Analyze customer demographics (e.g., age groups, gender distribution).
- 12. Identify the least-performing regions and their contributing factors.
- 13. Develop a dashboard summarizing sales trends, key products, and regional performance.
- 14. Publish the report to Power BI Service.
- 15. Share the report link with stakeholders and configure row-level security.



