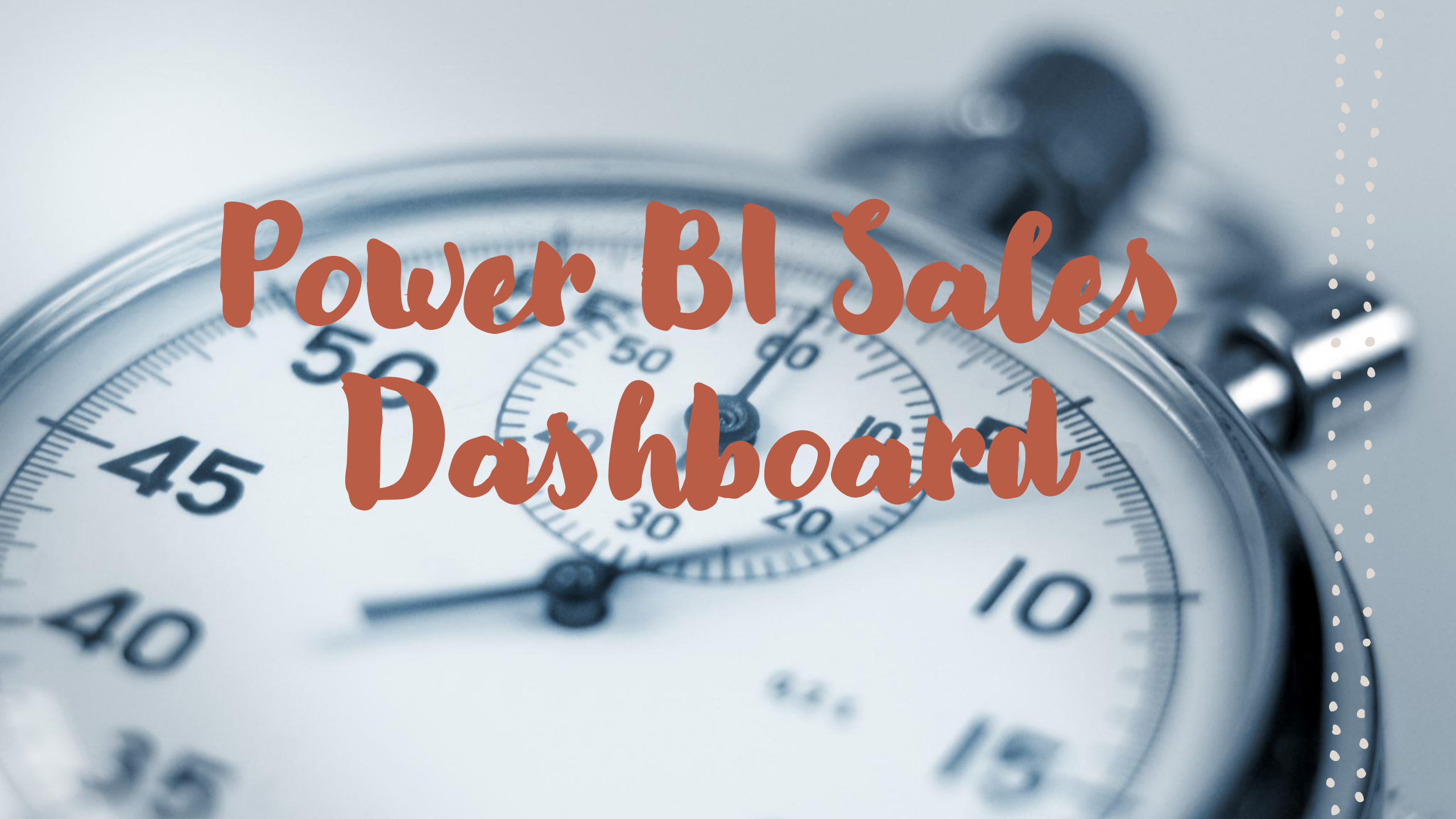

Power BI Sales
Dashboard

Table Contents:

Description of the sales table

1.Starting with Defining the **Objective**, **data collection**, **preparation**, and **cleaning** it to ensure accuracy and consistency.

2. step of **data modelling**, and establish meaningful relationships between tables and create a solid foundation for the analysis.

3. By using **Power BI Desktop**, we are going to create stunning **reports** that effectively communicate sales performance and trends. With a range of intuitive visualizations and interactive features at disposal. Like craft compelling charts, graphs, and tables that provide valuable insights at a glance.

4.Using **DAX Calculation,** creating dynamic **filters and Slicers,** and utilizing power bi's collaboration and sharing features.

The Objectives of the sales Dashboard/Business Problems

Calculate Total Sales: calculate and display the total sales value for the selected period, allowing users to understand the overall revenue generated

Calculate Profit: calculate and visualize the total profit archived based on the sales data, providing insights into the financial performance.

Analyse Orders: Analyse the number of orders placed during the selected period, helping to identify sales patterns and order trends.

Calculate Profit Margin: Calculate and visualize the profit margin percentage, enabling users to access the profitability of products or services.

Compare Sales by Product with previous year: compare sales performance for each product between the selected period and the previous year, highlighting growth or decline sales.

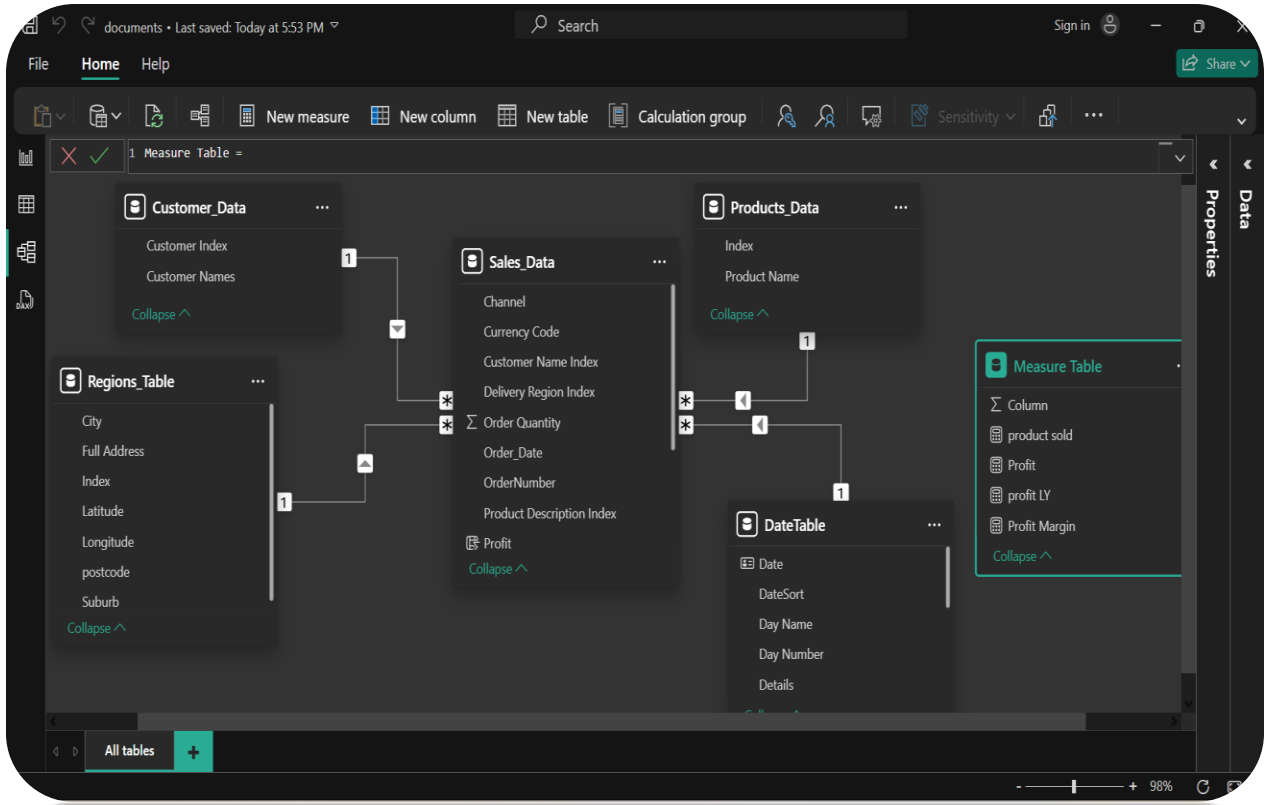
Compare Sales by months with previous year: compare sales performance across different months between the selected period and the previous year, identifying regions with significant changes.

Display top 5 Cities: presenting a visualization showcasing the top5 cities based on sales, allowing users to quickly identify the most lucrative locations

Compare profit by channel with previous year: compare profit generated by each channel between the selected period and the previous year, indicating improvements or challenges in profitability.

Analyse sales by customer and compare with previous year: analyse sales data by customer, highlighting the performance of individual customer and comparing it to the previous year.

Creating slicers for Date, City, Product, and Channel: Enable users to interact with the data by providing slicers for selecting specific dates, cities, products, and channels, allowing for dynamic filtering and personalized analysis.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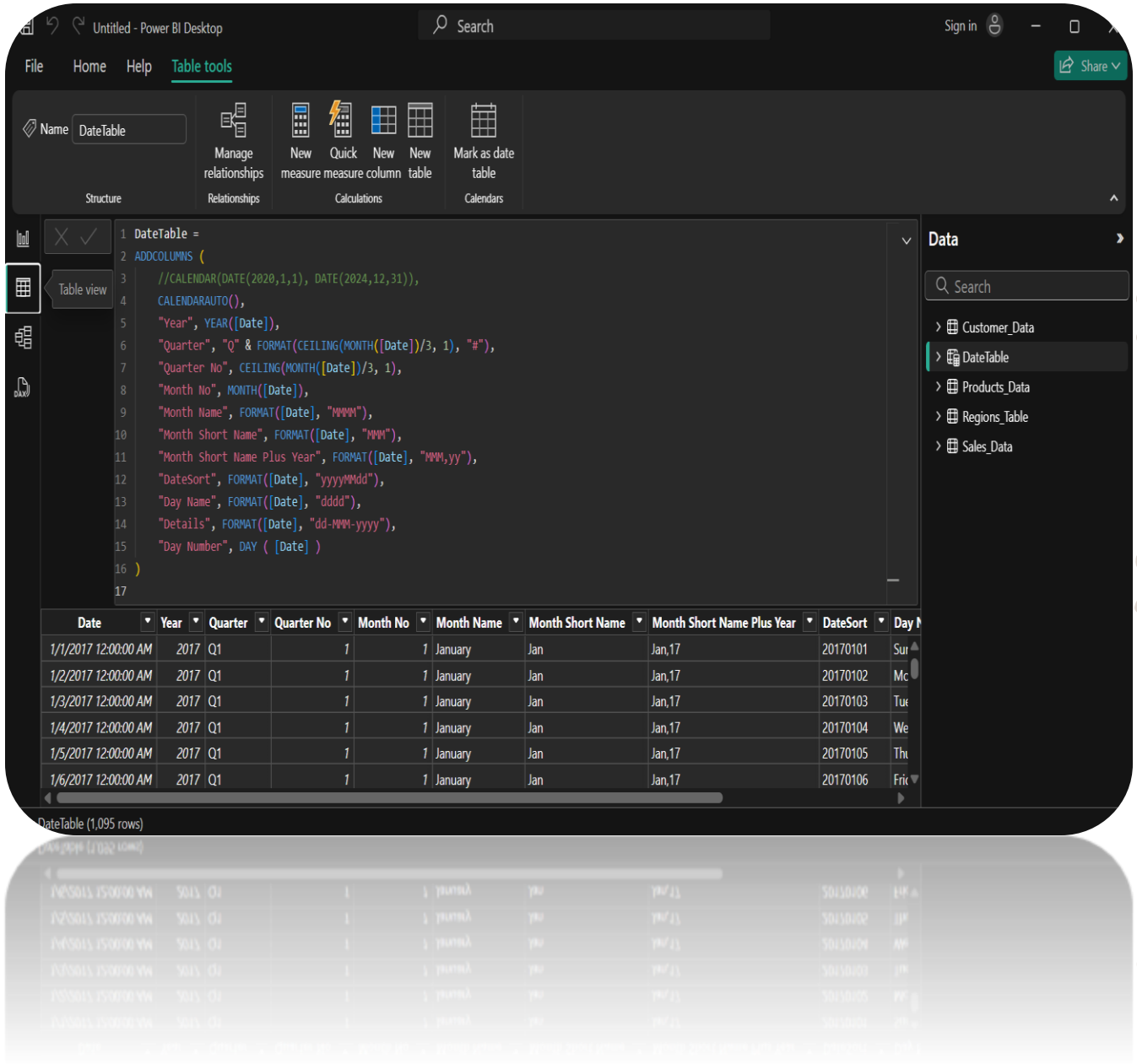
1 Measure Table =
Customer_Data
Customer Index
Customer Names
Collapse
Sales_Data
Channel
Currency Code
Customer Name Index
Delivery Region Index
Order Quantity
Order_Date
OrderNumber
Product Description Index
Profit
Collapse
Products_Data
Index
Product Name
Collapse
Regions_Table
City
Full Address
Index
Latitude
Longitude
postcode
Suburb
Collapse
Measure Table
Column
product sold
Profit
profit LY
Profit Margin
Collapse
DateTable
Date
DateSort
Day Name
Day Number
Details
Properties
Data
All tables
98%


Sign in
Share
Data
Search
Customer_Data
DateTable
Measure Table
Column
product sold
Profit
profit LY
Profit Margin
Profit Vs LY
Profit Vs LY %
Sales
sales PY
sales Vs PY
sales Vs sales L...
Total Cost
Products_Data
Regions_Table
Sales_Data
63%
9:13 PM
1/23/2025

Steps followed for an end-to-end PowerBI Project

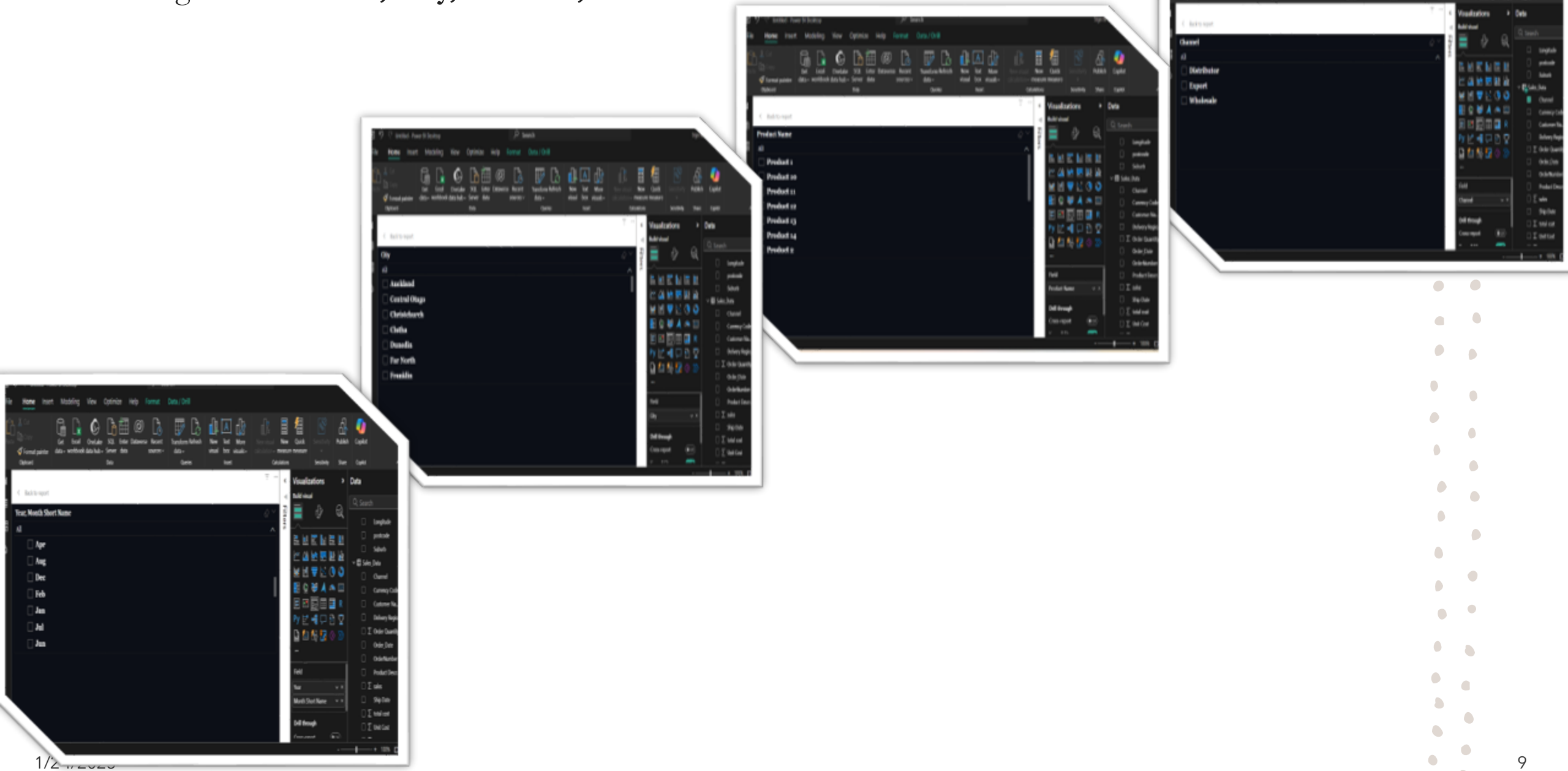
- **Gather Data:** Collecting necessary data for the Project. This could include data from various sources such as databases, spreadsheet, or web services. Ensuring the data is accurate and relevant to your objective.
- **Power Query Data Extract, Transform And load:** power query editor power bi is powerful tool data for cleaning and transformation. We will use it clean and transform the data to make it suitable for analysis. This may involve removing duplicates, handling missing values, merging datasets, or creating calculated columns.
- **Create a Date table:** to work with data analysis expression(DAX) time intelligence functions, there's a prerequisite model requirement.

```
Date Table =
ADDCOLUMNS (
    //CALENDAR(DATE(2020,1,1), DATE(2024,12,31)),
    CALENDARAUTO(),
    "Year", YEAR([Date]),
    "Quarter", "Q" & FORMAT(CEILING(MONTH([Date])/3, 1), "#"),
    "Quarter No", CEILING(MONTH([Date])/3, 1),
    "Month No", MONTH([Date]),
    "Month Name", FORMAT([Date], "MMMM"),
    "Month Short Name", FORMAT([Date], "MMM"),
    "Month Short Name Plus Year", FORMAT([Date], "MMM,yy"),
    "DateSort", FORMAT([Date], "yyyyMMdd"),
    "Day Name", FORMAT([Date], "dddd"),
    "Details", FORMAT([Date], "dd-MMM-yyyy"),
    "Day Number", DAY ( [Date] )
)
```



- **Create Data Model in Power BI Desktop:** Designing and creating a data model that represents the relationships between different tables in the data. Establishing proper relationships, define keys, and establish hierarchies if needed.

- Creating Slicers – **Date, City, Product, and Channel**

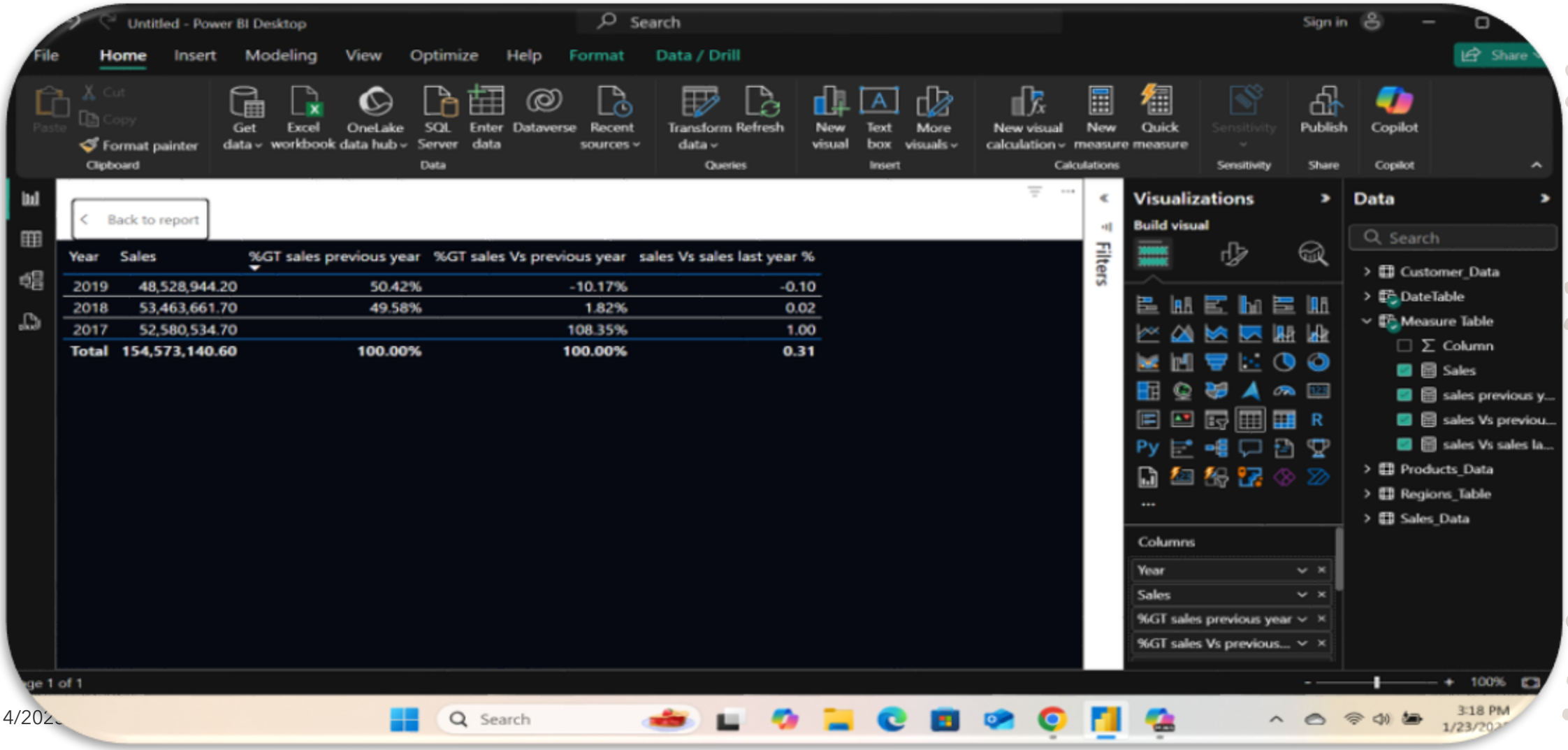


- Create Dax measures

- Create Visuals:

  1) Sales By Product and Comparing it with last year's Sales.

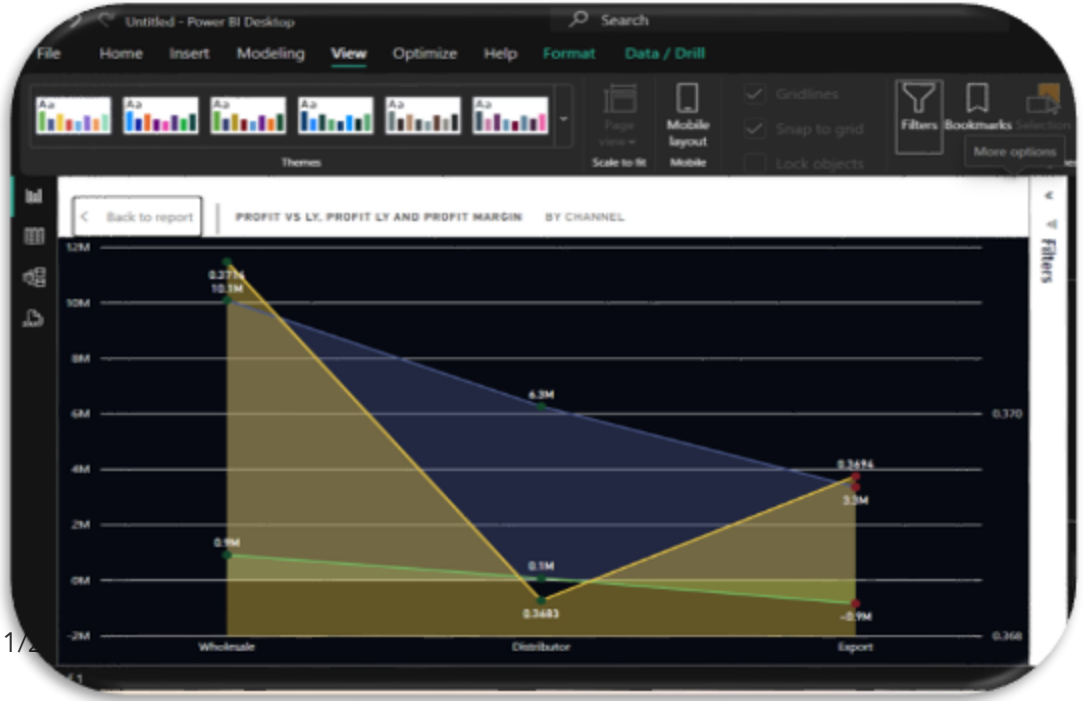
  2) Sales By Month and Comparing it with last year's Sales



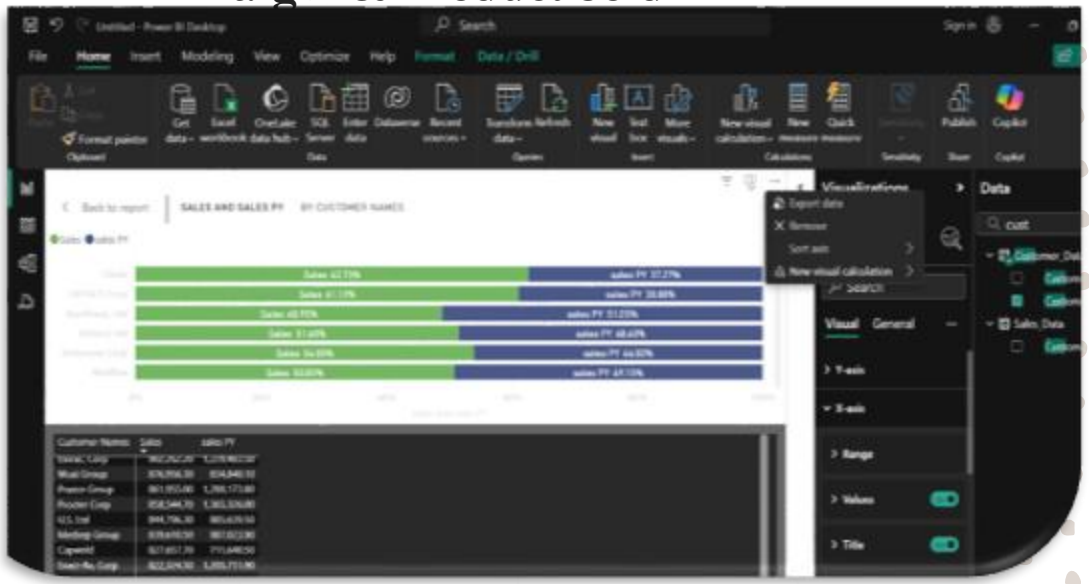
- 3) Sales of top 5 Cities

4) Compare Profit by channel with Previous

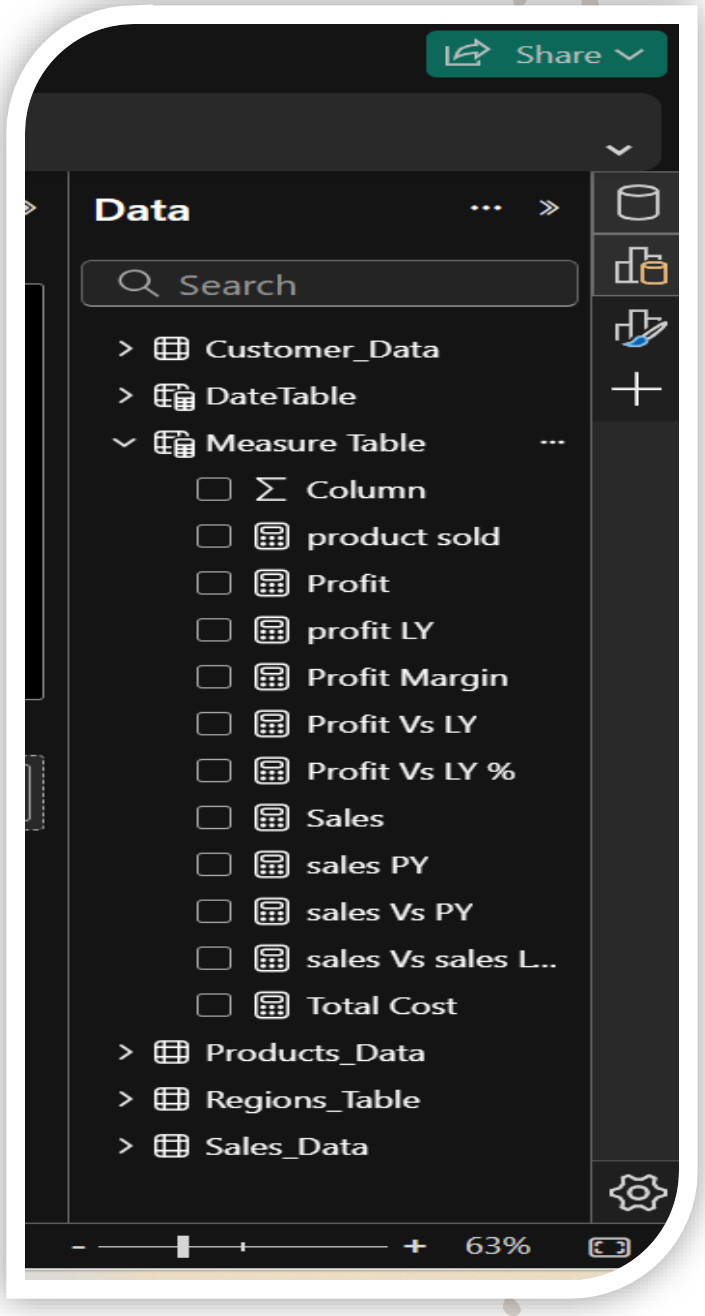
5) Sales By Customer and Comparing it with last year's Sales



6) Create Cards for Sales, Profit, Profit Margin & Product Sold



- **Implementing DAX Calculations**
- Measures Total Sales
- Sales = SUM(Sales_Data[Sales])
- Measures Previous Year Toal Sales
- Sales PY = CALCULATE([Sales], SAMEPERIODLASTYEAR(DateTable[Date]))
- **Diffrenece Between Current Year Sales & Previous Year Sales**
- Sales vs PY = [Sales] - [Sales PY]
- Percentage Increase or Decrease in sales year on year (YOY%)
- Sales vs py % = DIVIDE([Sales vs PY],[Sales],0)>> Products Sold = SUM(Sales_Data[Order Quantity])
- Profit = SUM(Sales_Data[Profit])
- Profit LY = CALCULATE([Profit], SAMEPERIODLASTYEAR(DateTable[Date]))
- Profit Vs LY = [Profit]- [Profit LY]
- Profit vs LY % = [Profit Vs LY]/[Profit]
- Profit Margin = DIVIDE([Profit],[Sales],0)
- Total Cost = SUM(Sales_Data[Total Cost])



Sales Dashboard 2022

Conclusion

- The conclusion of the document highlights the effective use of Power BI to create a sales dashboard that analyzes various sales performance metrics such as total sales, profit, profit margin, orders, and customer performance. It emphasizes implementing DAX calculations and creating visuals to provide insightful and interactive data.
- Reference: YouTube (Data wofls)