

Power BI Installation

Contents

1. Steps to follow download and install	2
---	---

Power BI Installation

1. Steps to follow download and install

- ✓ Click on below url

<https://www.microsoft.com/en-us/download/details.aspx?id=58494>

Important! Selecting a language below will dynamically change the complete page content to that language.

Select language

English

▼

Download

Expand all

 | [Collapse all](#)

▼ Details

Version:	Date Published:
2.138.1004.0	11/19/2024
File Name:	File Size:
PBIDesktopSetup.exe	504.9 MB
PBIDesktopSetup_x64.exe	544.9 MB

✓ Select to download

Choose the download you want

☐ File Name

Size

<input type="checkbox"/> PBIDesktopSetup.exe	504.9 MB
<input type="checkbox"/> PBIDesktopSetup_x64.exe	544.9 MB

Download

Total size: 0 bytes

Choose the download you want

☐ File Name

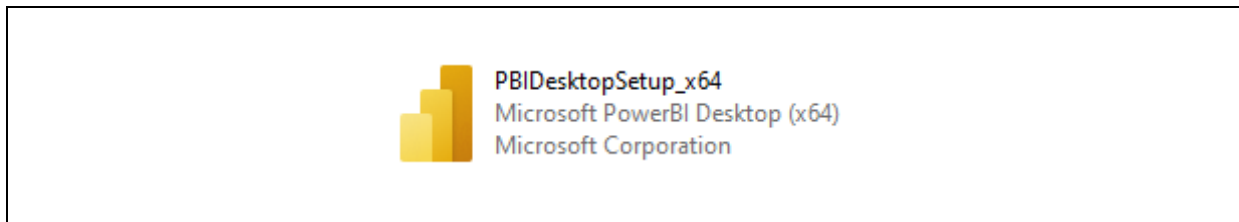
Size

<input checked="" type="checkbox"/> PBIDesktopSetup.exe	504.9 MB
<input type="checkbox"/> PBIDesktopSetup_x64.exe	544.9 MB

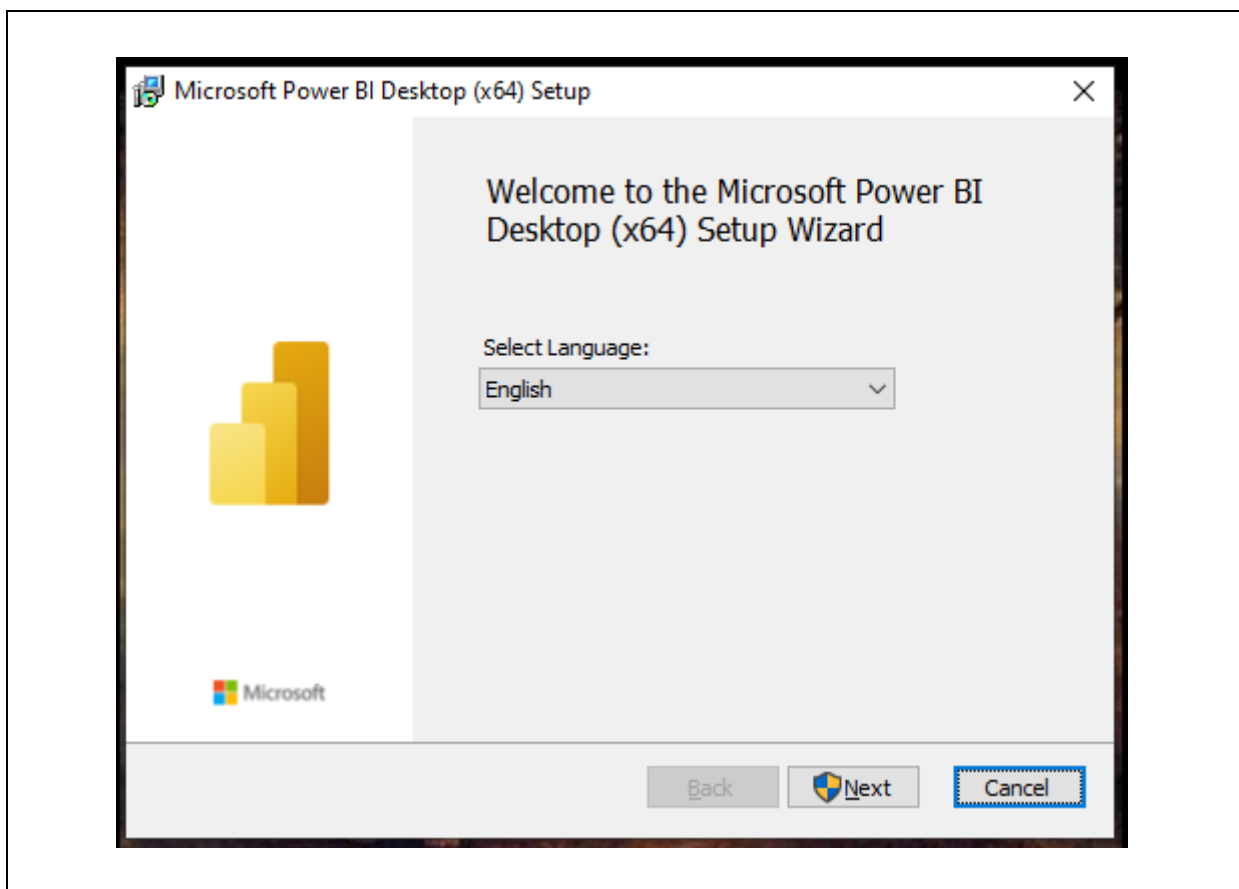
Download

Total size: 504.9 MB

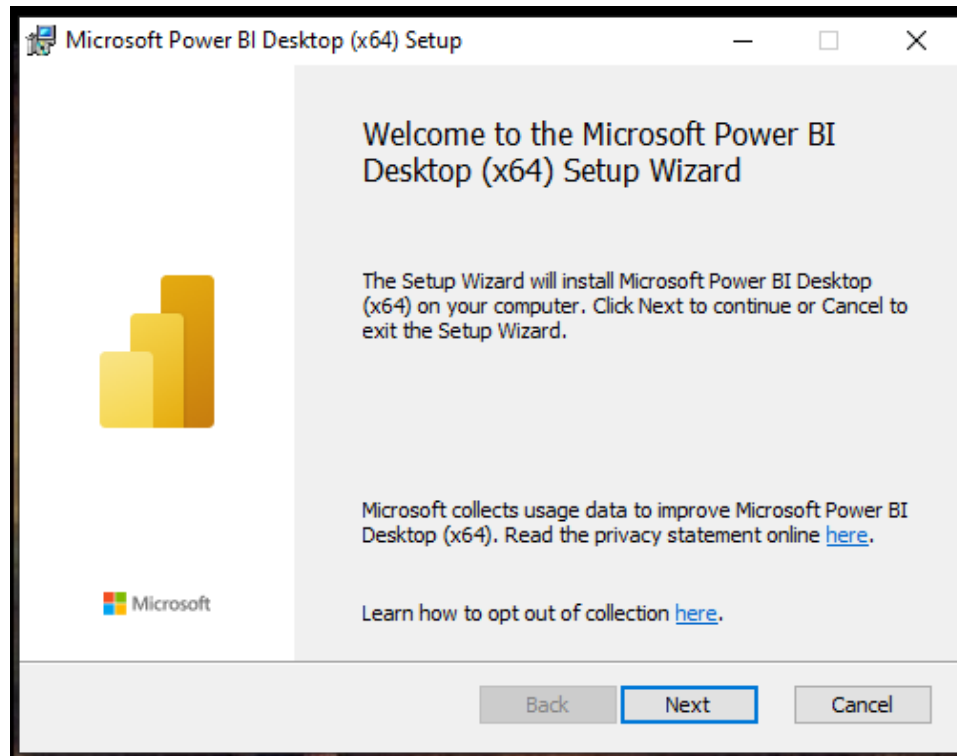
- ✓ Its .exe file



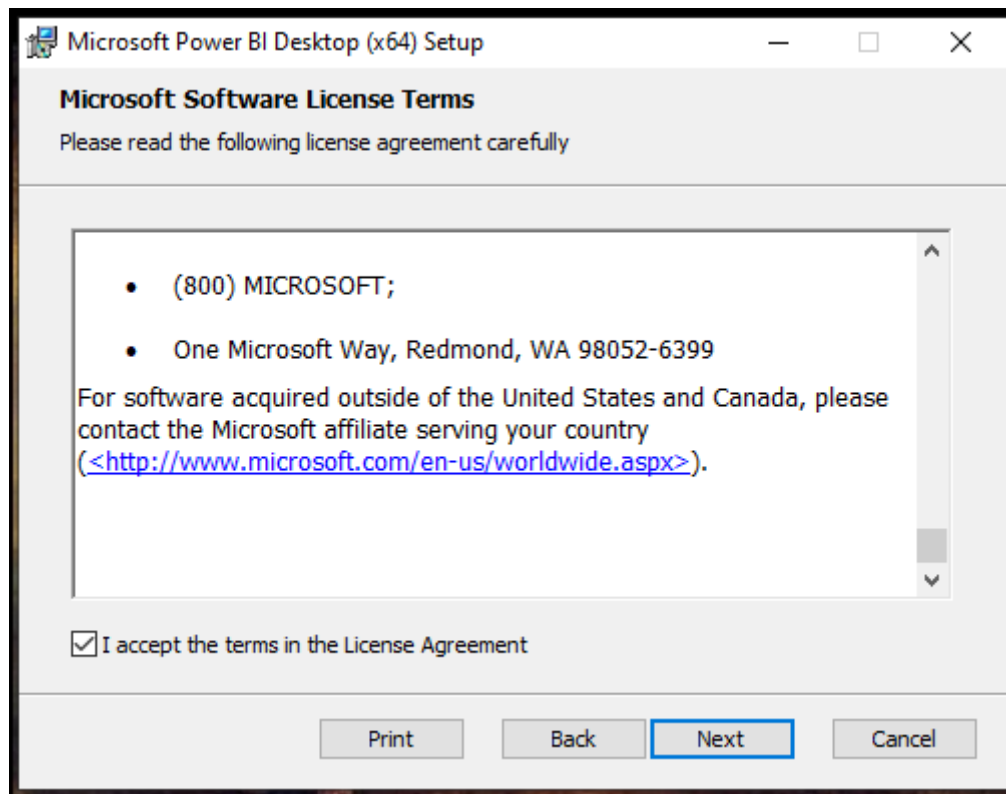
- ✓ Just give double click on the software



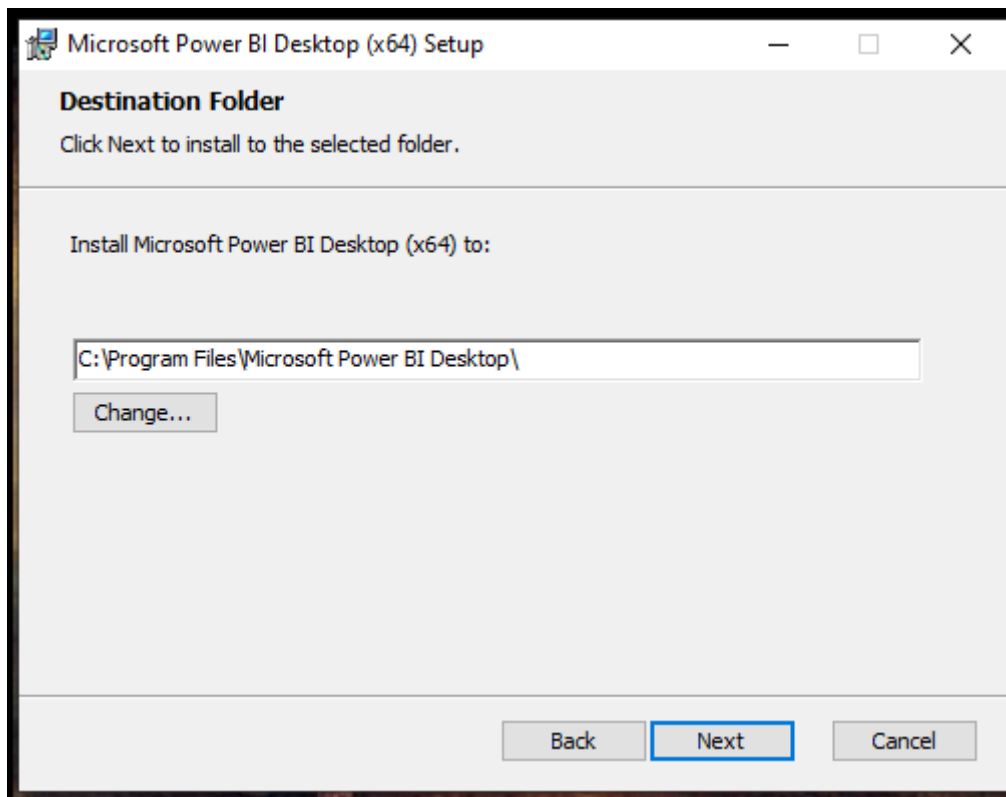
- ✓ Click on Next button



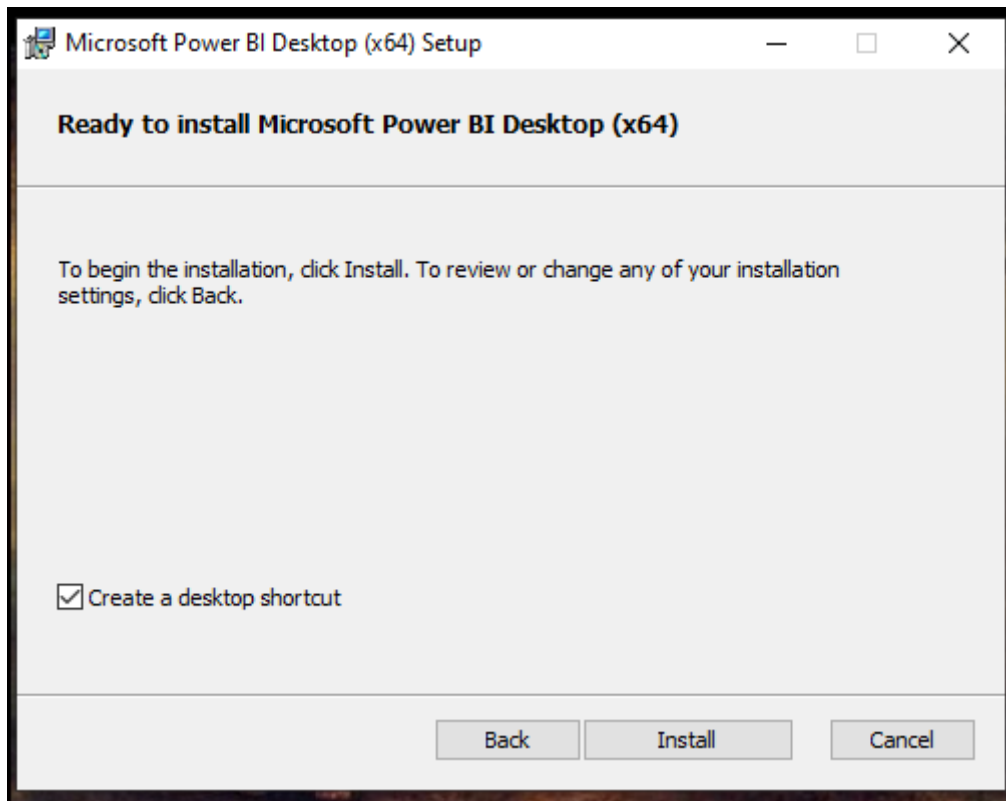
- ✓ Click on Next button

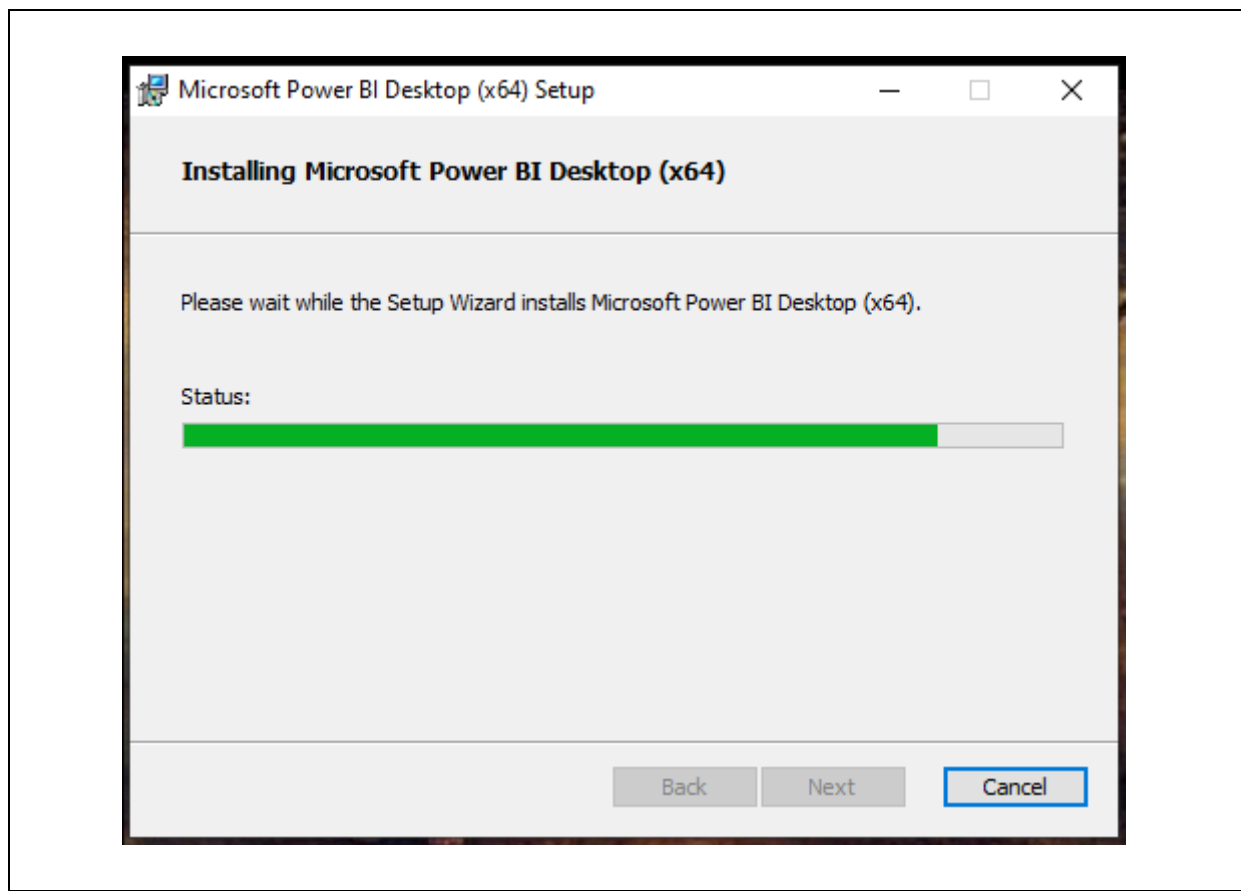


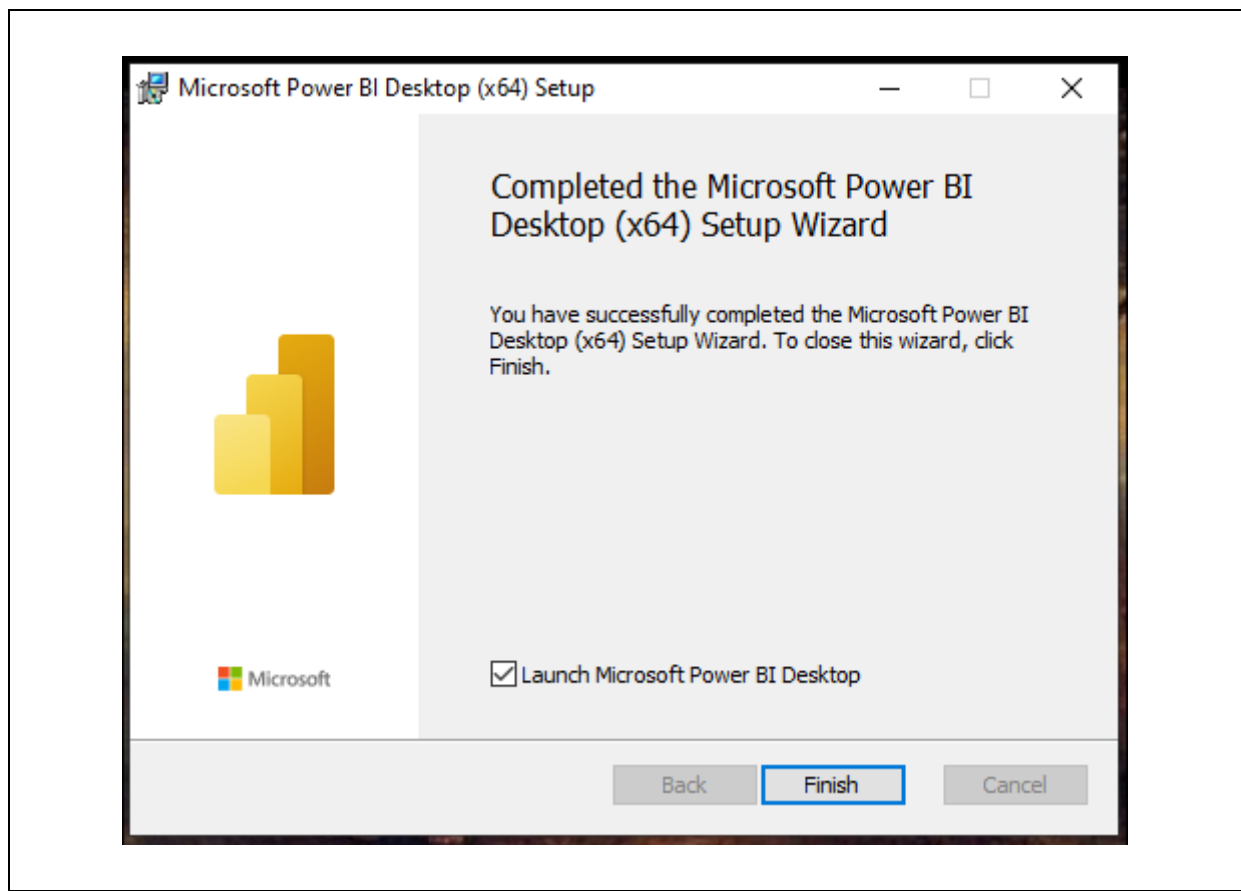
- ✓ Click on Next



- ✓ Click on Install





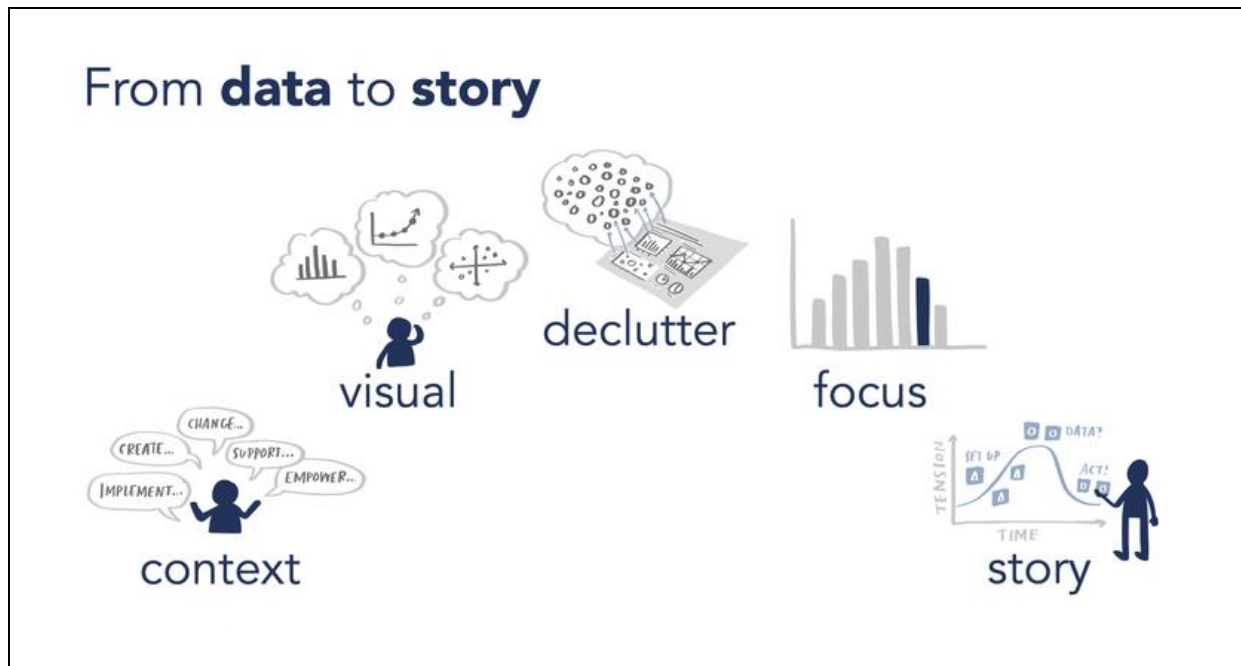


1. Power BI - Introduction

Contents

1. Power BI	2
2. Power BI: Key Features	3
3. Advantages	4
4. Power BI Core components	5
5. Power BI Desktop	6
5.1. Key Features of Power BI Desktop.....	6
6. Power Service	7
6.1. Key Features of Power BI Service.....	7
7. Comparison: Power BI Desktop vs. Power BI Service	8

1. Power BI - Introduction



1. Power BI

- ✓ **Power BI** is a Data Visualization and Business Intelligence **tool** from Microsoft.
- ✓ By using this we can collect, analyse, and visualize data.
- ✓ We can create interactive reports and dashboards to see important business data, like sales numbers or website traffic, in one place.
- ✓ It's like turning numbers into pictures (charts, graphs, etc.) to help make better decisions.

Power BI Logo



2. Power BI: Key Features

✓ Power Query

- Its an ETL tool, extract, transform & load the data
- Cleans, combines, and reshapes data.

✓ Power Pivot

- A data modeling tool.
- Establishes relationships between tables

✓ Power View

- A visualization tool
- Creates interactive data visualizations and dashboards.
- Designs charts, maps, and other visuals to represent data insights.

✓ Power BI Service

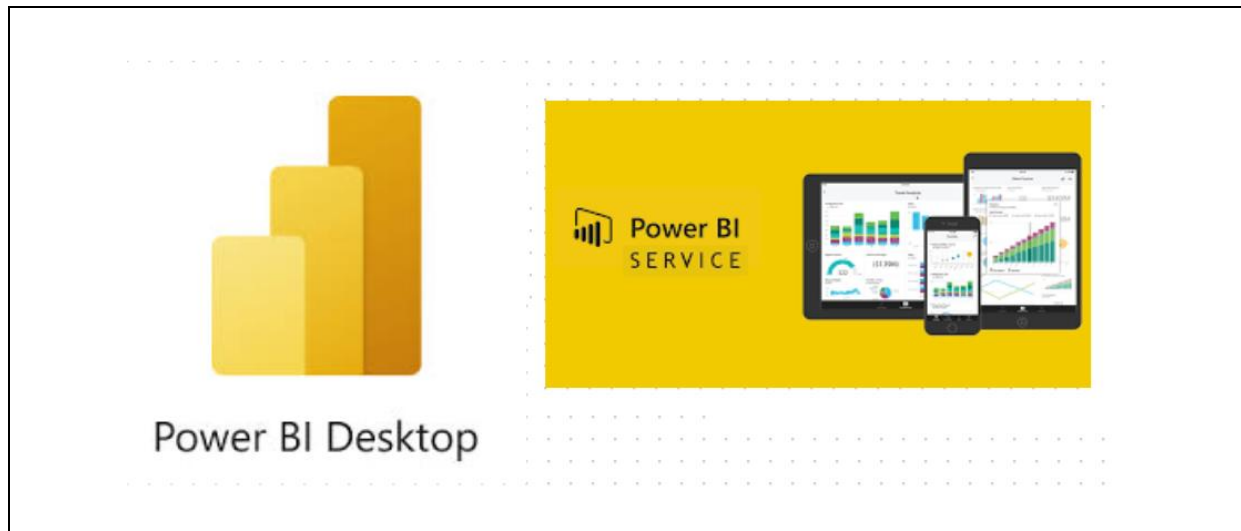
- A service for sharing and collaboration.
- Publishes, shares, and consumes reports and dashboards.
- Allows access to reports and dashboards via the web.
- Provides real-time data monitoring and alerts.

3. Advantages

- ✓ Easy to Use
 - It's simple to learn, even for people without a tech background. You can drag and drop data to create reports.
- ✓ Connects to Many Data Sources
 - Power BI can pull data from lots of places—Excel, databases, cloud services like Google Analytics, and more.
- ✓ Data Easy to Understand
 - You can create visual reports (like graphs and charts) that are easy to read and explore.
- ✓ Real-Time Updates
 - You can see up-to-the-minute data, which is helpful for tracking business performance right now.
- ✓ Sharing and Collaboration
 - It's easy to share your reports with others, and you can work together in real time.
- ✓ Secure
 - It has built-in security to keep your data safe.
- ✓ Smart Features
 - Power BI uses **Artificial Intelligence** to help you spot trends or get automatic insights from your data.

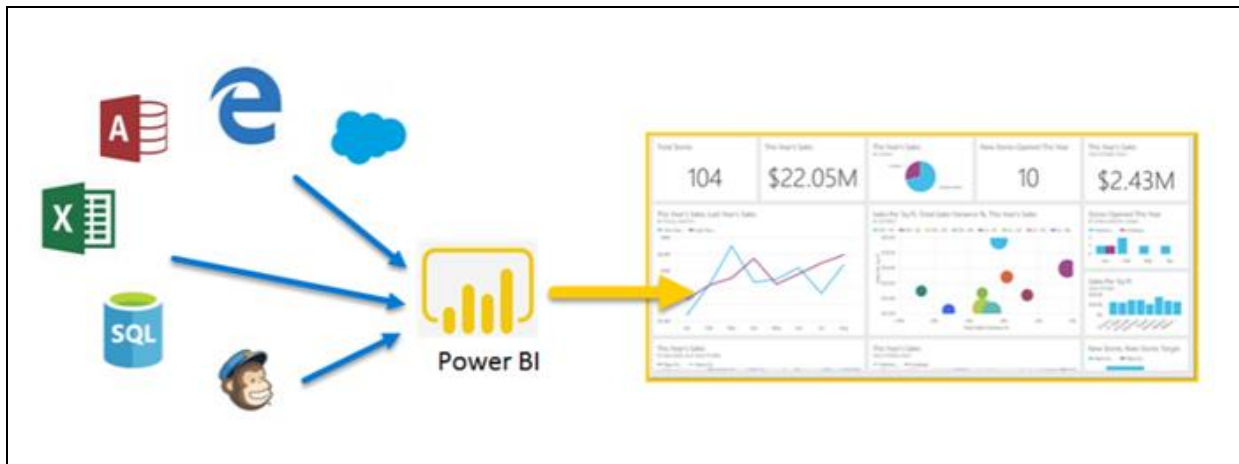
4. Power BI Core components

- ✓ Power BI Desktop
- ✓ Power BI Service



5. Power BI Desktop

- ✓ Power BI Desktop is a Windows-based application.
- ✓ Users can create, design, and develop interactive reports and data models.
- ✓ It is the primary tool for data preparation, modeling, and visualization.



5.1. Key Features of Power BI Desktop

- ✓ Data Import and Transformation
 - Connects to various data sources (Excel, databases, APIs, etc.).
 - Cleans and transforms data using Power Query.
- ✓ Data Modeling
 - Establishes relationships between tables.
 - Enables advanced calculations using DAX (Data Analysis Expressions).
- ✓ Visualization Creation
 - Offers a wide range of charts, graphs, and custom visuals.
- ✓ No Internet Required
 - Fully functional offline for data analysis and report creation.

6. Power Service

- ✓ Power BI Service is a **cloud-based platform**.
- ✓ Users can publish, share, and collaborate on Power BI reports and dashboards.
- ✓ It enables real-time access to reports sharing across teams and organizations.

6.1. Key Features of Power BI Service

- ✓ Report and Dashboard Hosting
 - Hosts reports created in Power BI Desktop.
- ✓ Collaboration and Sharing
 - Shares reports and dashboards with colleagues or stakeholders securely.
 - Supports comments, feedback, and collaborative analysis.
- ✓ Real-Time Data Monitoring
 - Connects to live data sources for real-time insights.
 - Sends alerts for data changes or thresholds via notifications.
- ✓ Access Anywhere
 - Accessible from any device with an internet connection, including mobile devices.
- ✓ Scheduled Data Refresh
 - Automatically updates data from connected sources at regular intervals.

7. Comparison: Power BI Desktop vs. Power BI Service

Feature	Power BI Desktop	Power BI Service
1. Purpose	✓ Create & design reports	✓ Share, collaborate & access reports
2. Platform	✓ Windows application	✓ Cloud based application
3. Visualization	✓ Full report creation capabilities	✓ Primarily dashboard creation
4. Collaboration	✓ No collaboration features	✓ Enables sharing and commenting
5. Internet Dependency	✓ Works offline	✓ Requires internet
6. Real-Time Data	✓ Not supported directly	✓ Supports real-time updates

2. Power BI – Creating Charts

Contents

1. Column Chart	2
1.1. Initial steps	2
1.2. Steps to create column chart	5
2. Stacked Column Chart	9
2.1. Steps to create stacked column chart.....	9
3. Pie Chart	12
3.1. Steps to create stacked column chart.....	12
4. Donut Chart	14
4.1. Steps to create stacked column chart.....	14
5. Funnel Chart	16
5.1. Steps to create Funnel chart	16
6. Include and Exclude	18
6.1. Steps to create stacked column chart.....	18
7. View Data and Export in CSV from Power BI	21

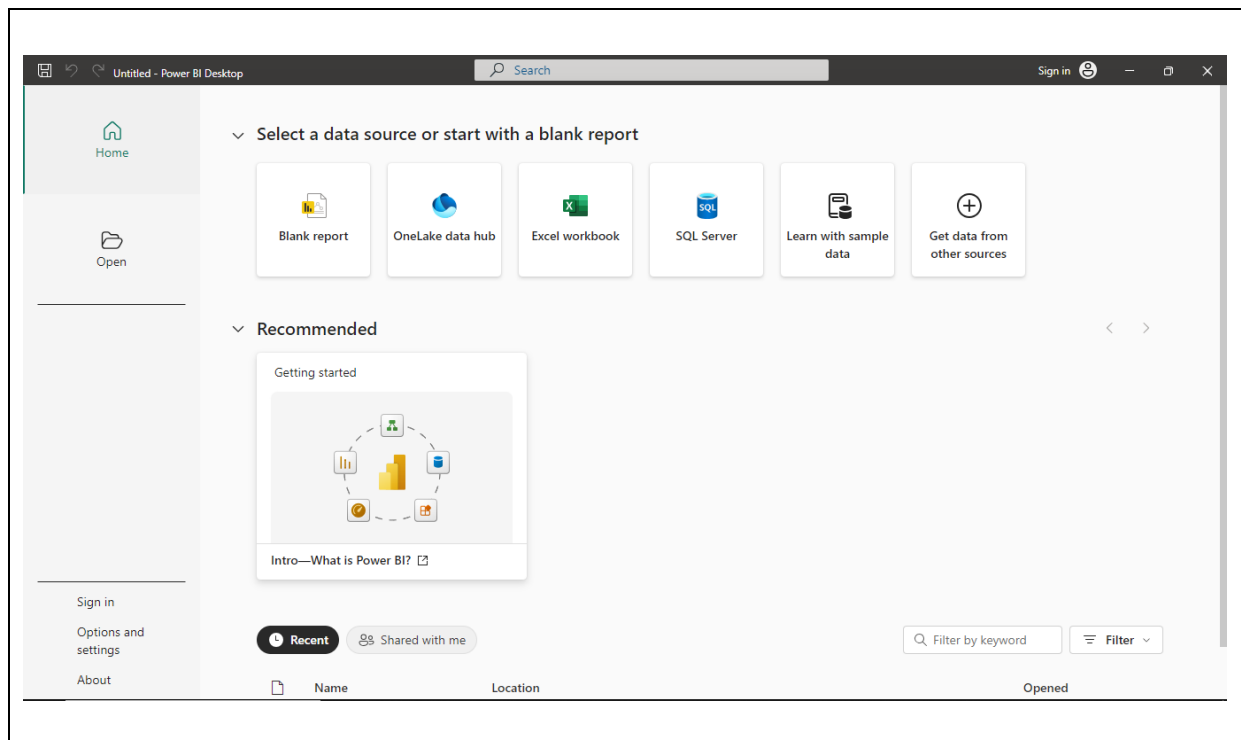
2. Power BI – Creating Charts

1. Column Chart

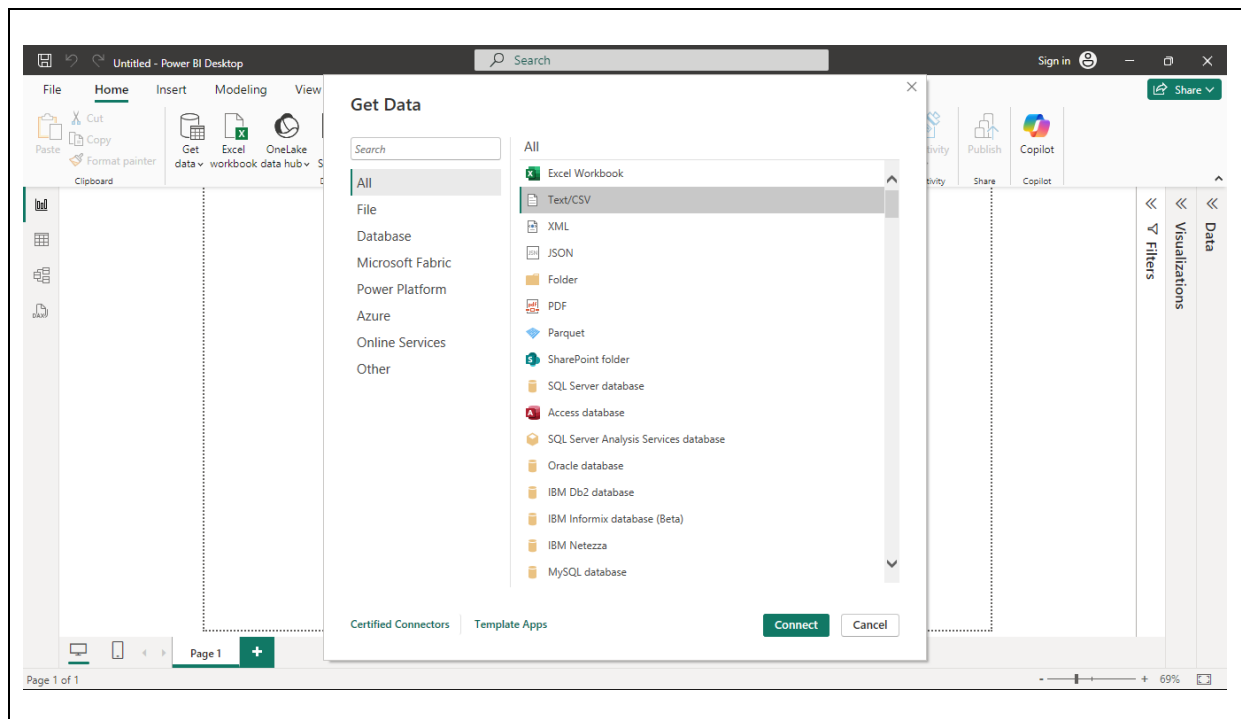
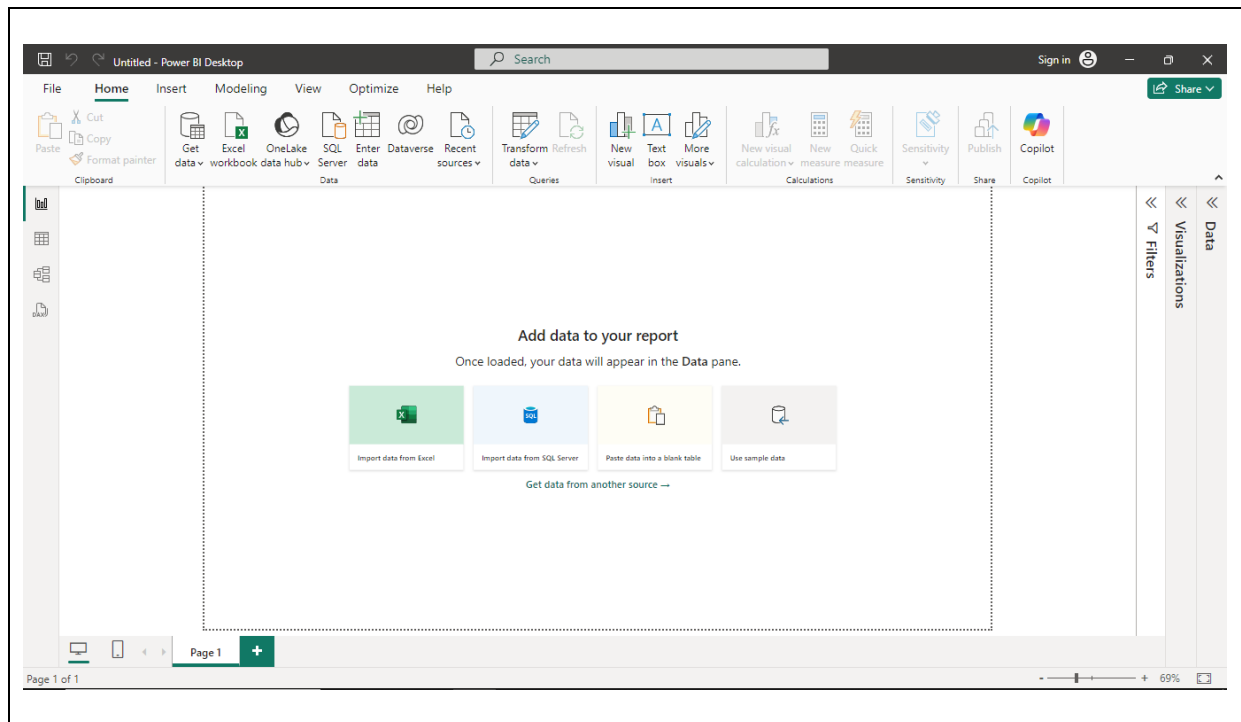
- ✓ A **Column Chart** in Power BI is a visual representation of data using vertical bars to show values for different categories.
- ✓ It is one of the most commonly used charts.
- ✓ By using this we can compare the quantities across categories or tracking changes over time.

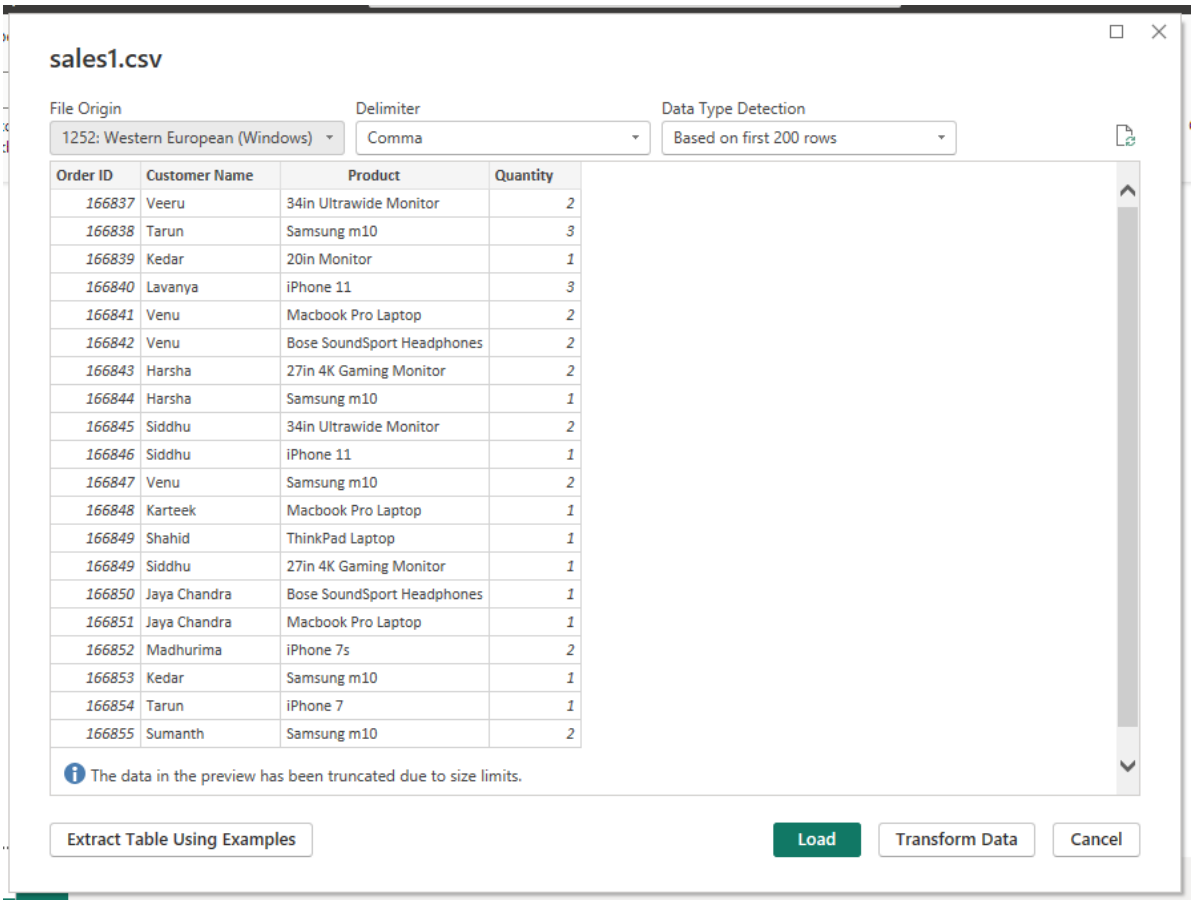
1.1. Initial steps

- ✓ Open Power BI Desktop.
- ✓ Click on blank report.
- ✓ Import your dataset by clicking **Home > Get Data** and selecting the file type (Excel, CSV, database, etc.).
- ✓ Ensure your data loaded.



Data Science – Power BI – Creating Charts





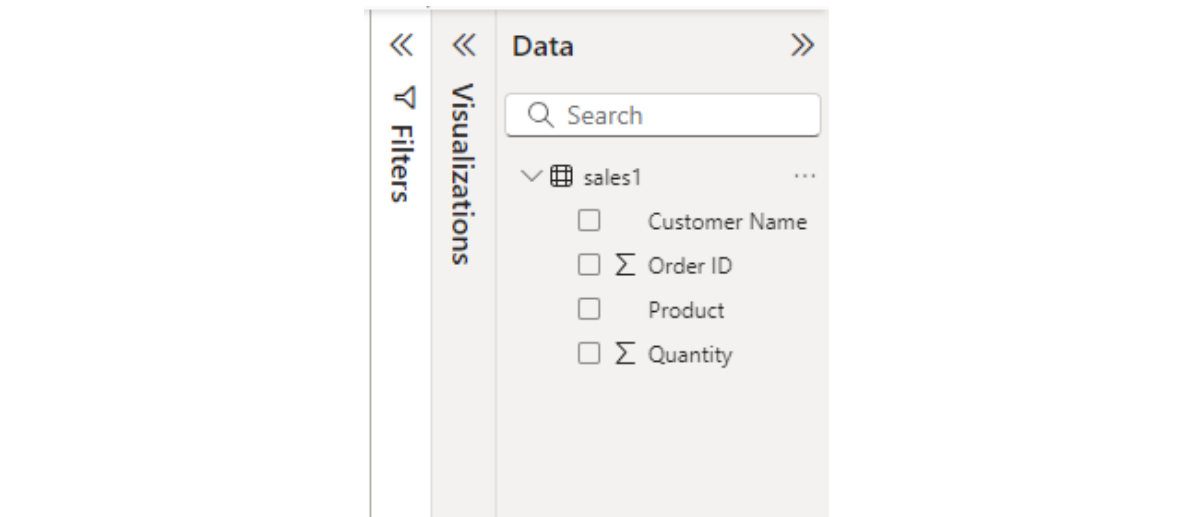
sales1.csv

File Origin: 1252: Western European (Windows) | Delimiter: Comma | Data Type Detection: Based on first 200 rows

Order ID	Customer Name	Product	Quantity
166837	Veeru	34in Ultrawide Monitor	2
166838	Tarun	Samsung m10	3
166839	Kedar	20in Monitor	1
166840	Lavanya	iPhone 11	3
166841	Venu	Macbook Pro Laptop	2
166842	Venu	Bose SoundSport Headphones	2
166843	Harsha	27in 4K Gaming Monitor	2
166844	Harsha	Samsung m10	1
166845	Siddhu	34in Ultrawide Monitor	2
166846	Siddhu	iPhone 11	1
166847	Venu	Samsung m10	2
166848	Karteek	Macbook Pro Laptop	1
166849	Shahid	ThinkPad Laptop	1
166849	Siddhu	27in 4K Gaming Monitor	1
166850	Jaya Chandra	Bose SoundSport Headphones	1
166851	Jaya Chandra	Macbook Pro Laptop	1
166852	Madhurima	iPhone 7s	2
166853	Kedar	Samsung m10	1
166854	Tarun	iPhone 7	1
166855	Sumanth	Samsung m10	2

The data in the preview has been truncated due to size limits.

Extract Table Using Examples | Load | Transform Data | Cancel



Visualizations

Filters

Data

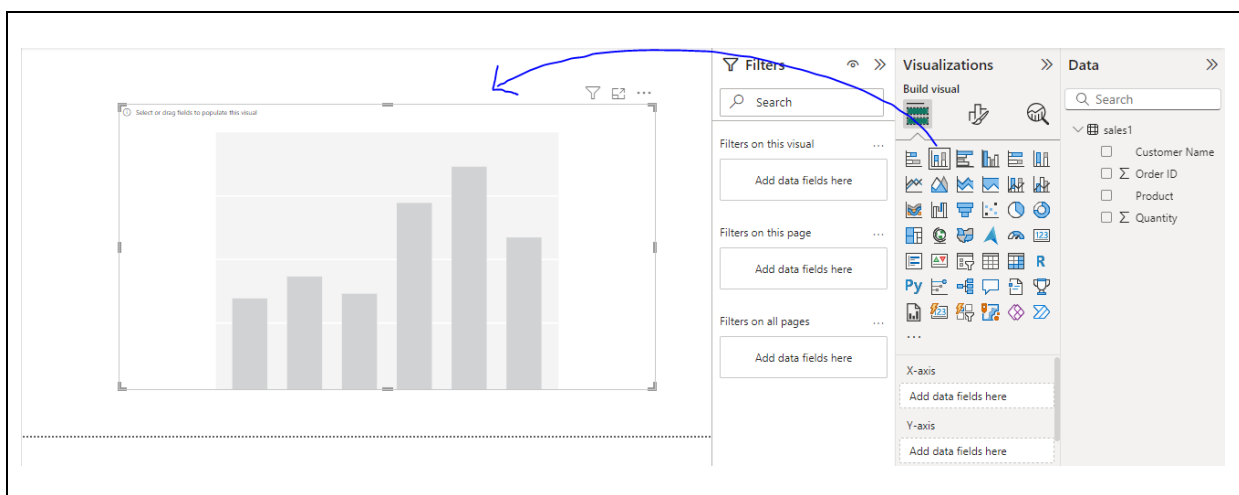
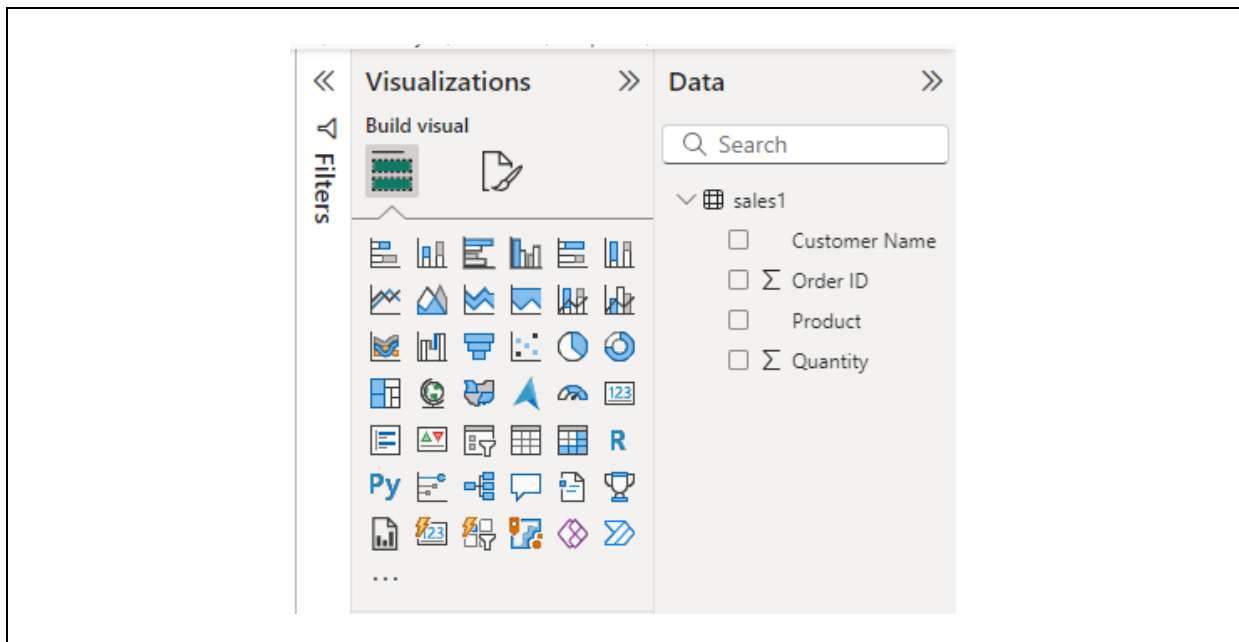
Search

sales1

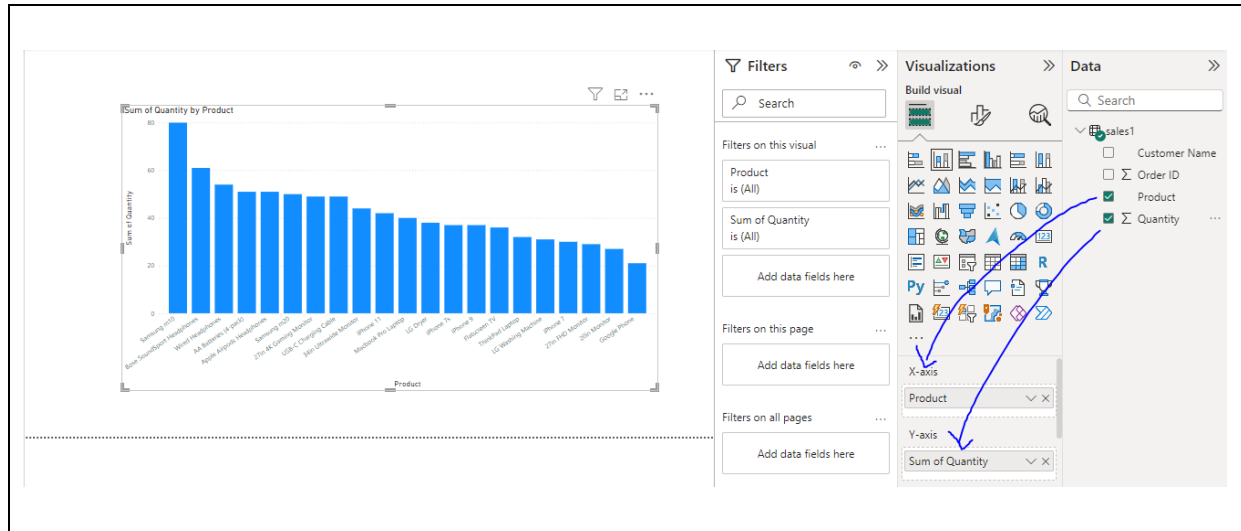
- ☐ Customer Name
- ☐ Σ Order ID
- ☐ Product
- ☐ Σ Quantity

1.2. Steps to create column chart

- ✓ Open Power BI Desktop.
- ✓ Load the data: **sales1.csv**
- ✓ Select the Column Chart from the Visualizations pane.
- ✓ Drag fields to:
 - X Axis: product
 - Y Axis: quantity
 - Legend: The subcategory (if having)
- ✓ Customize using the Format Visual pane to adjust colors, labels, and axis titles.



Data Science – Power BI – Creating Charts



More options

✓ Format your visual

✓ **Visual**

- X-axis
 - Values -> On or off
 - Font
 - Colors
 - Title -> On or off
 - Title Text
 - Style
 - Font
 - Color
 - Layout
 - Width
- Y-axis
 - Range(optional)
 - Values -> On or off
 - Font
 - Colors
 - Display units
 - Title -> On or off
 - Title Text
 - Style
 - Font
 - Color
- Legend -> On or off
 - Options
 - Top left
 - Top to centre
 - Lot of other options too
 - Text
 - Font
 - Color
 - Title -> On or off

- Title Text

- Data labels -> On or off
- Total labels -> On or off

- ✓ **General**

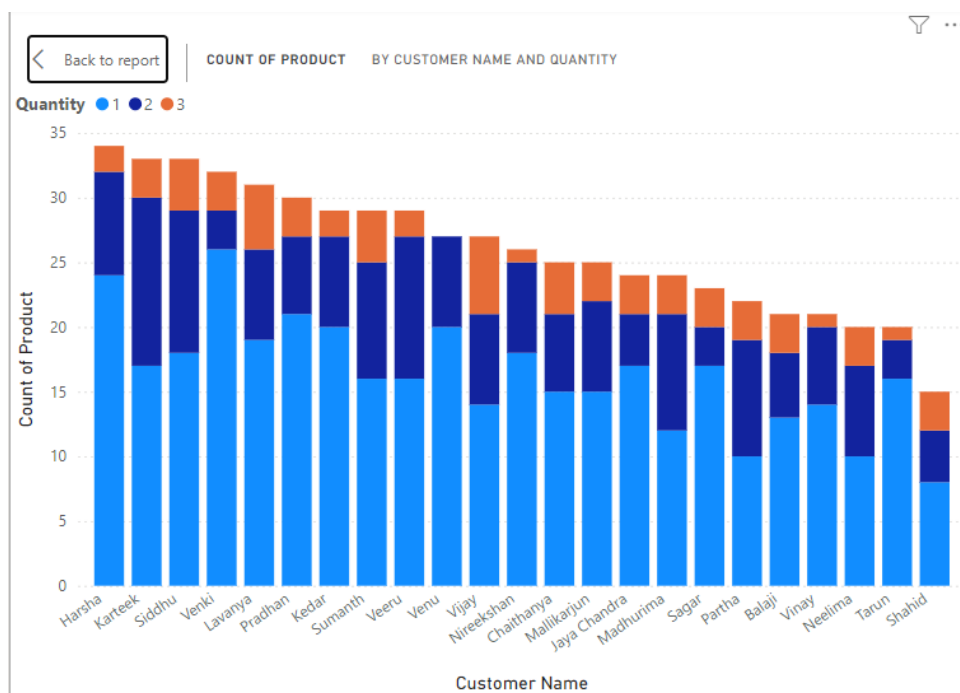
- Title -> On or off

2. Stacked Column Chart

- ✓ A **Stacked Column Chart** in Power BI is a variation of the column chart where the values for each category are represented as **stacked segments** on a single vertical bar.
- ✓ Each segment of the bar represents a **subcategory's contribution** to the total value of that category.
- ✓ In the column chart, data values are displayed side-by-side, whereas they are stacked one over the other in the stacked chart.

2.1. Steps to create stacked column chart

- ✓ Open Power BI Desktop.
- ✓ Load the data: **sales1.csv**
- ✓ Select the Stacked Column Chart from the Visualizations pane.
- ✓ Drag fields to:
 - X Axis: product
 - Y Axis: quantity
 - Legend: The subcategory (if having)
- ✓ Customize using the Format Visual pane to adjust colors, labels, and axis titles.



More options

✓ Format your visual

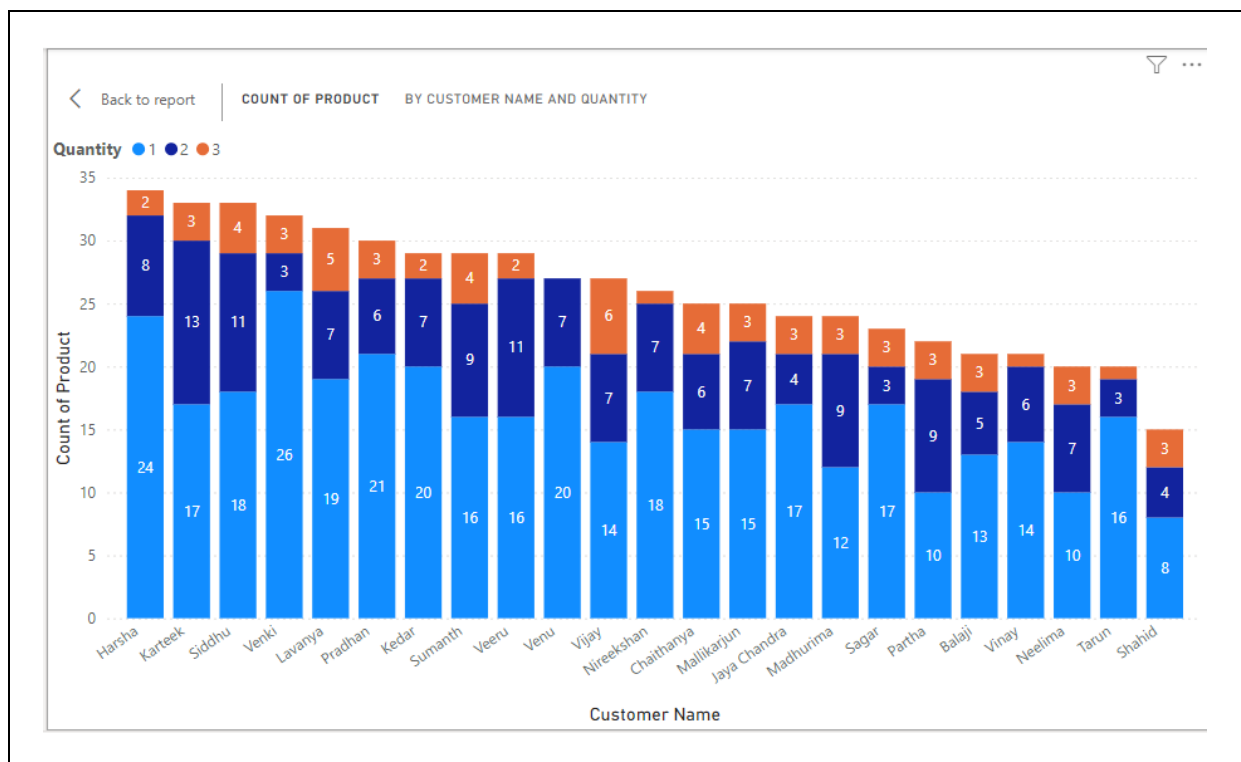
✓ **Visual**

- X-axis
 - Values -> On or off
 - Font
 - Colors
 - Title -> On or off
 - Title Text
 - Style
 - Font
 - Color
 - Layout
 - Width
- Y-axis
 - Range(optional)
 - Values -> On or off
 - Font
 - Colors
 - Display units
 - Title -> On or off
 - Title Text
 - Style
 - Font
 - Color
- Legend -> On or off
 - Options
 - Top left
 - Top to centre
 - Lot of other options too
 - Text
 - Font
 - Color

- Title -> On or off
 - Title Text
- Data labels -> On or off
- Total labels -> On or off

✓ General

- Title -> On or off

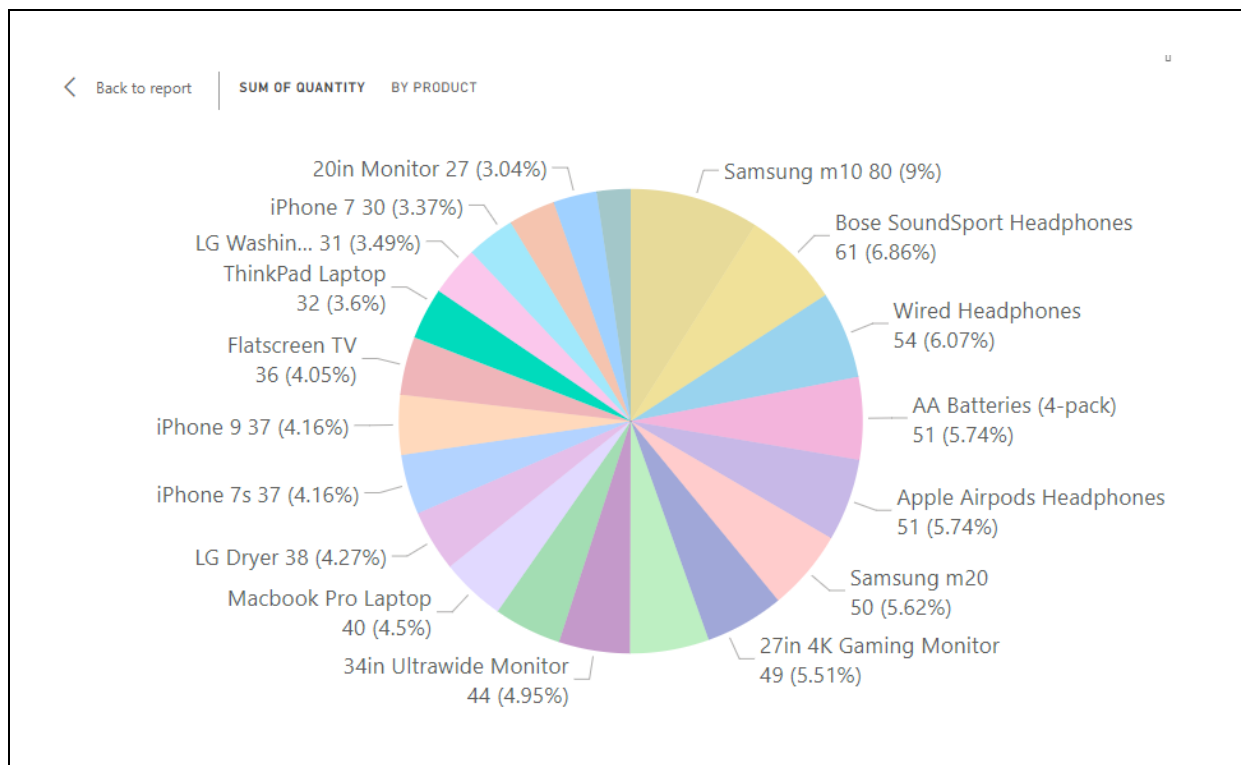


3. Pie Chart

- ✓ A pie chart in Power BI is a visual representation used to show the proportions or percentages of a whole data.
- ✓ It is shaped like a circle divided into slices.
- ✓ Each slice represents a category corresponds to its value compared to the total.
- ✓ For example, to see the total sales split by product.

3.1. Steps to create stacked column chart

- ✓ Open Power BI Desktop.
- ✓ Load the data: **sales1.csv**
- ✓ Select the Pie chart from the Visualizations pane.
- ✓ Drag fields to:
 - Legend: product
 - Values: quantity
- ✓ Customize using the Format Visual pane to adjust colors, labels



More options

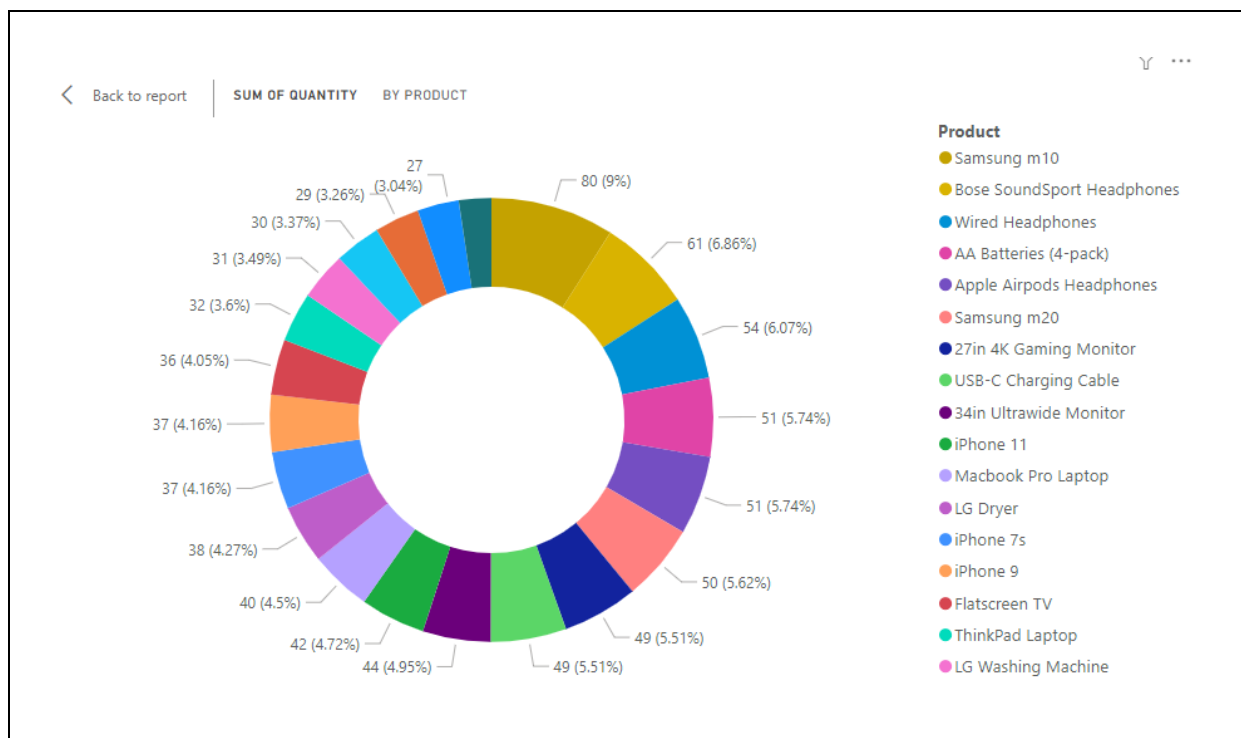
- ✓ Format your visual
- ✓ Visual
 - Legend -> On or off
 - Options
 - Top left
 - Top to centre
 - Lot of other options too
 - Text
 - Font
 - Color
 - Title -> On or off
 - Title Text
 - Slices
 - Colors
- ✓ Detail labels -> On or off
 - Options
 - Position
 - Outside
 - Inside
 - Prefer outside
 - Prefer inside
 - Label contents
 - Category
 - Data values
 - Percent of values
 - Category, Data values
 - Category, Percent of values
 - Data values, Percent of values
 - All detail labels
 - Values
 - Font
 - Color
 - Background

4. Donut Chart

- ✓ A donut chart is a circular chart, which could present values of a dataset in the form of slices of a donut.
- ✓ The donut chart is exactly the same as a pie chart.
- ✓ The only difference is pie chart has a circle, but a donut chart is in donut shape.

4.1. Steps to create stacked column chart

- ✓ Open Power BI Desktop.
- ✓ Load the data: **sales1.csv**
- ✓ Select the Donut chart from the Visualizations pane.
- ✓ Drag fields to:
 - Legend: product
 - Values: quantity
- ✓ Customize using the Format Visual pane to adjust colors, labels



More options

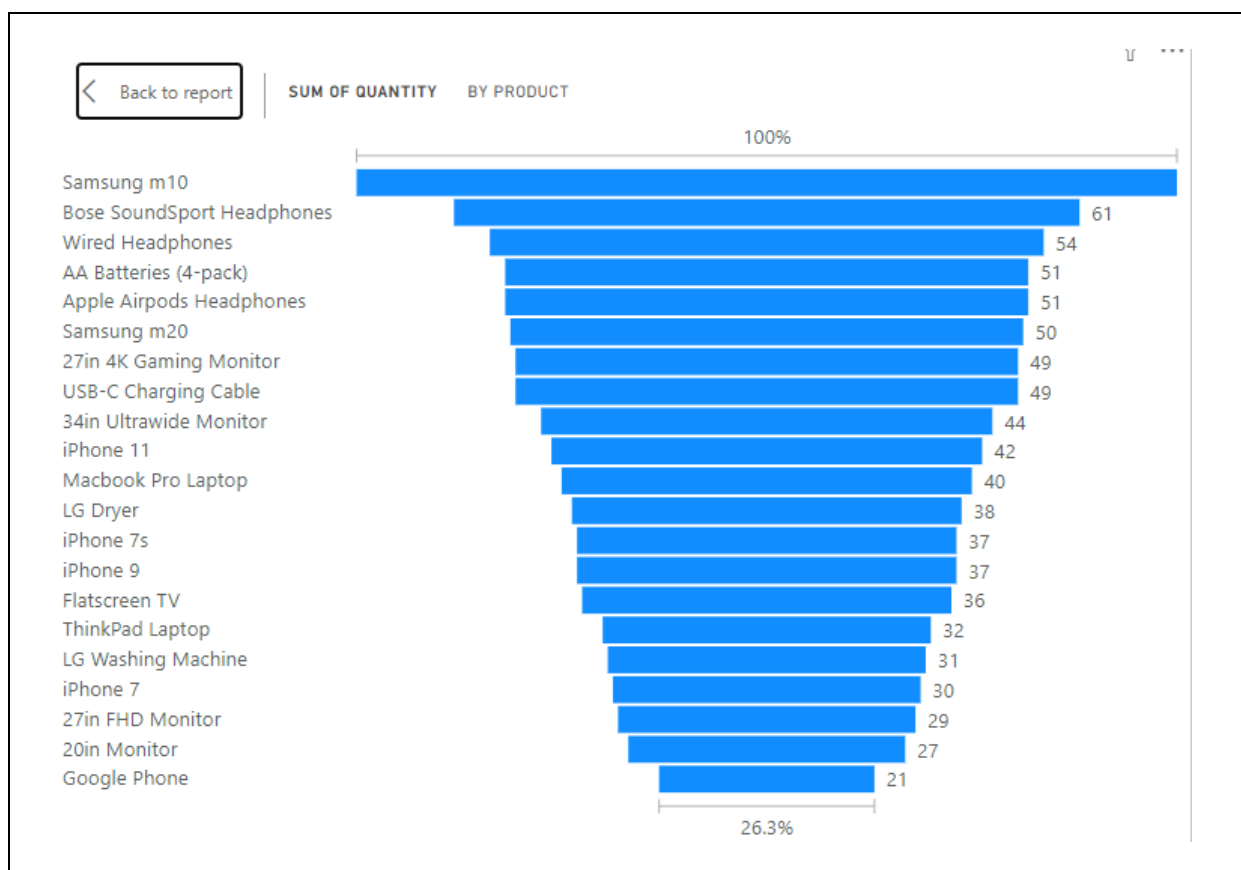
- ✓ Format your visual
- ✓ Visual
 - Legend -> On or off
 - Options
 - Top left
 - Top to centre
 - Lot of other options too
 - Text
 - Font
 - Color
 - Title -> On or off
 - Title Text
 - Slices
 - Colors
- ✓ Detail labels -> On or off
 - Options
 - Position
 - Outside
 - Inside
 - Prefer outside
 - Prefer inside
 - Label contents
 - Category
 - Data values
 - Percent of values
 - Category, Data values
 - Category, Percent of values
 - Data values, Percent of values
 - All detail labels
 - Values
 - Font
 - Color
 - Background

5. Funnel Chart

- ✓ A Funnel Chart in Power BI is a visual representation used to show data across stages in a process.
- ✓ It is particularly useful for visualizing workflows, sales pipelines, or any process that involves sequential stages.

5.1. Steps to create Funnel chart

- ✓ Open Power BI Desktop.
- ✓ Load the data: **sales1.csv**
- ✓ Select the Funnel chart from the Visualizations pane.
- ✓ Drag fields to:
 - Category: product
 - Values: quantity
- ✓ Customize using the Format Visual pane to adjust colors, labels



More options

- ✓ Colors
 - Default
 - Show all -> On or off

- ✓ Data labels -> On or off
 - Options
 - Position
 - Label contents
 - Data value
 - Percent of first
 - Percent of previous
 - Data value, percent of value
 - Data value, percent of previous

 - Values
 - Font Size
 - Color
 - Display units
 - Value decimal places
 - Percentage decimal places

 - Background
 - Color
 - Transparency

- ✓ Category labels -> On or off
 - Values
 - Font
 - Color

- ✓ Conversion labels -> On or off
 - Values
 - Font
 - Color

6. Include and Exclude

- ✓ In Power BI, Include and Exclude are sensitive filtering options.
- ✓ By using this we can refine and customize data visualizations by dynamically adding or removing data points.

Include

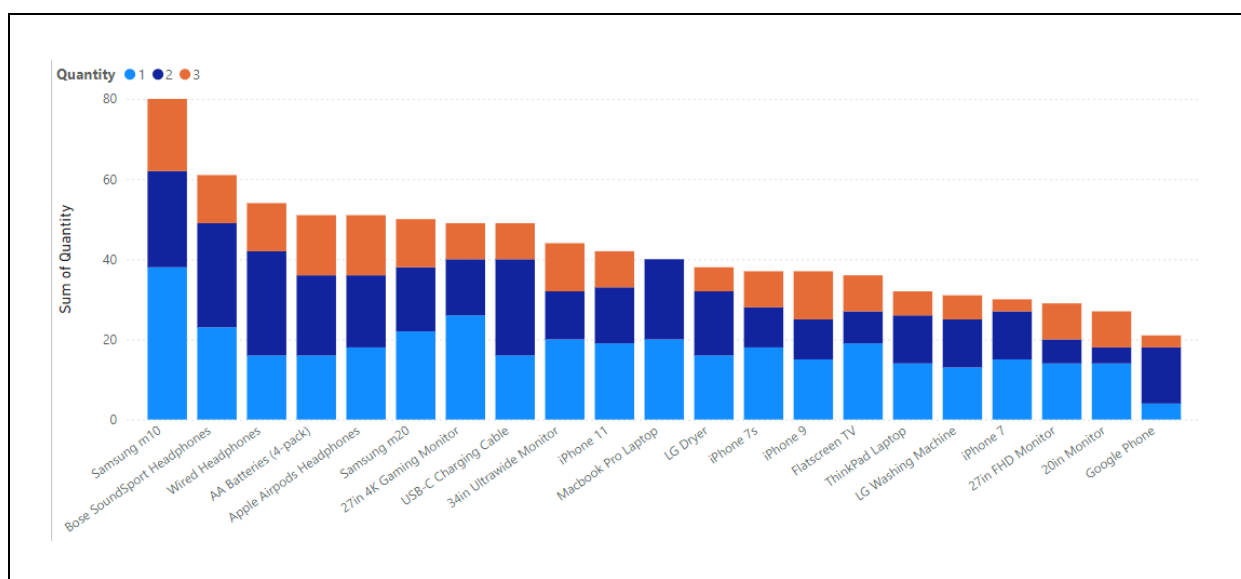
- ✓ Displays only the selected data points in a visual, helping focus on specific items.

Exclude

- ✓ Removes the selected data points from a visual, hiding irrelevant or unwanted items.

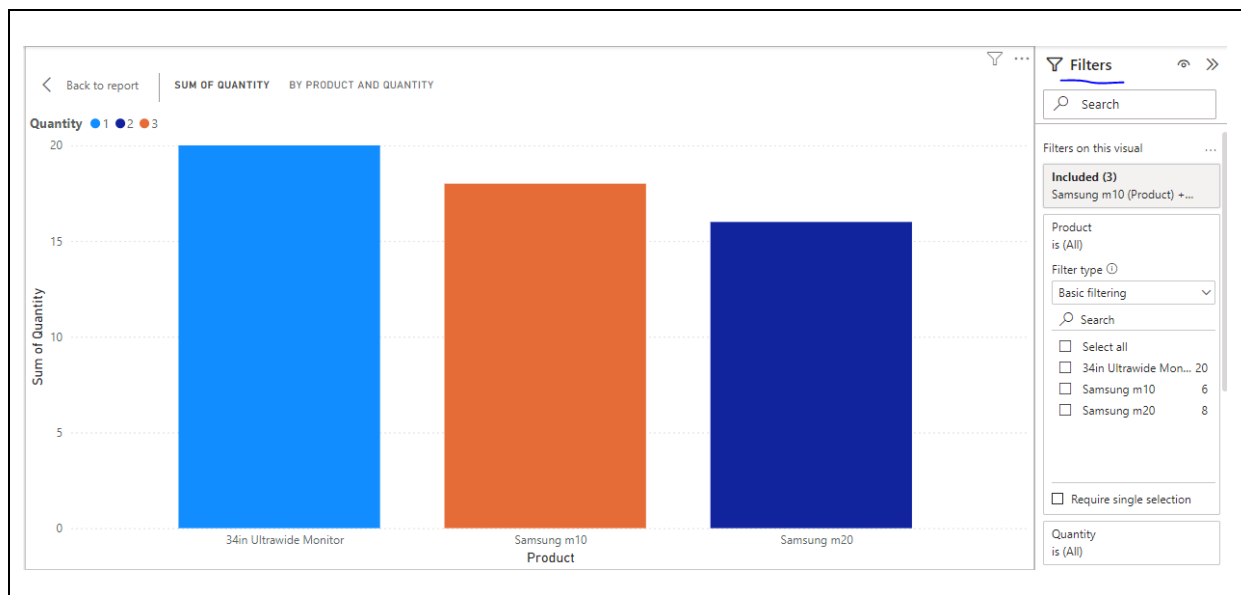
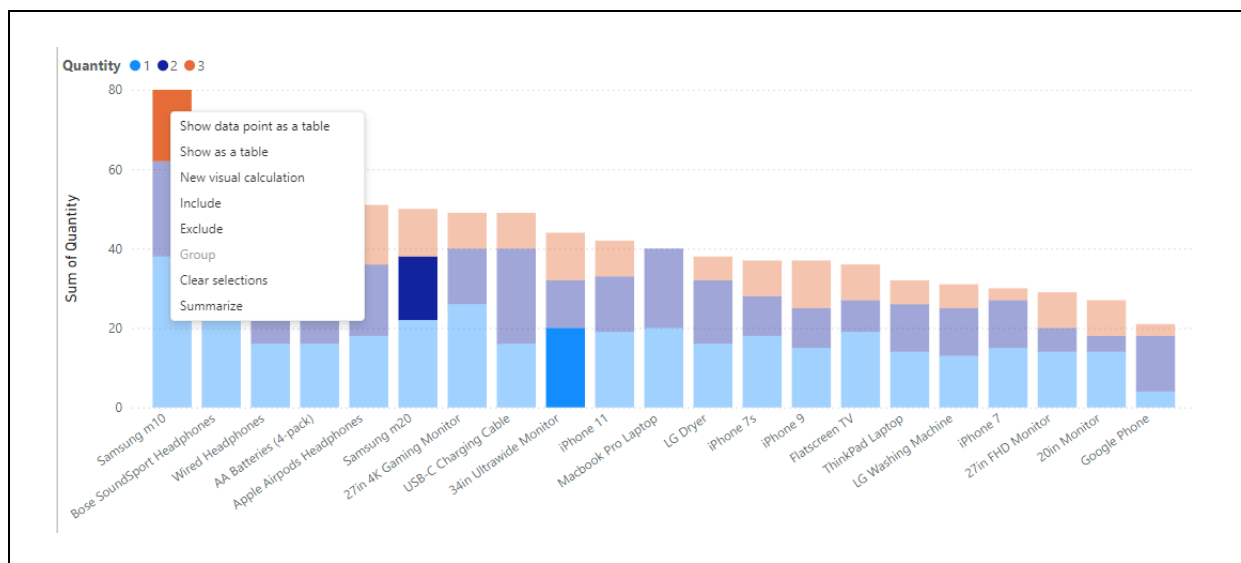
6.1. Steps to create stacked column chart

- ✓ Open Power BI Desktop.
- ✓ Load the data: **sales1.csv**
- ✓ Select the Stacked Column Chart from the Visualizations pane.
- ✓ Drag fields to:
 - X Axis: product
 - Y Axis: quantity
- ✓ Customize using the Format Visual pane to adjust colors, labels, and axis titles.



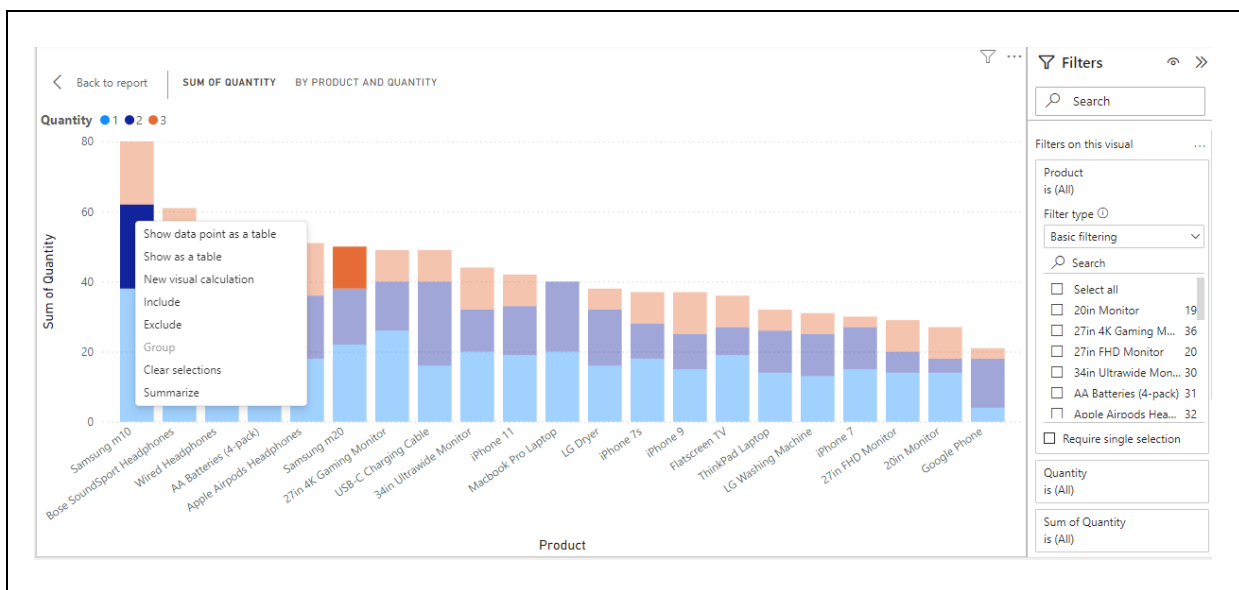
Include

- ✓ Displays only the selected data points in a visual, helping focus on specific items.
- ✓ Select items (using control) to include and compare each other.
- ✓ Give right click and select include option.
- ✓ To delete the include option items, select Filter panel and click on x(close) button



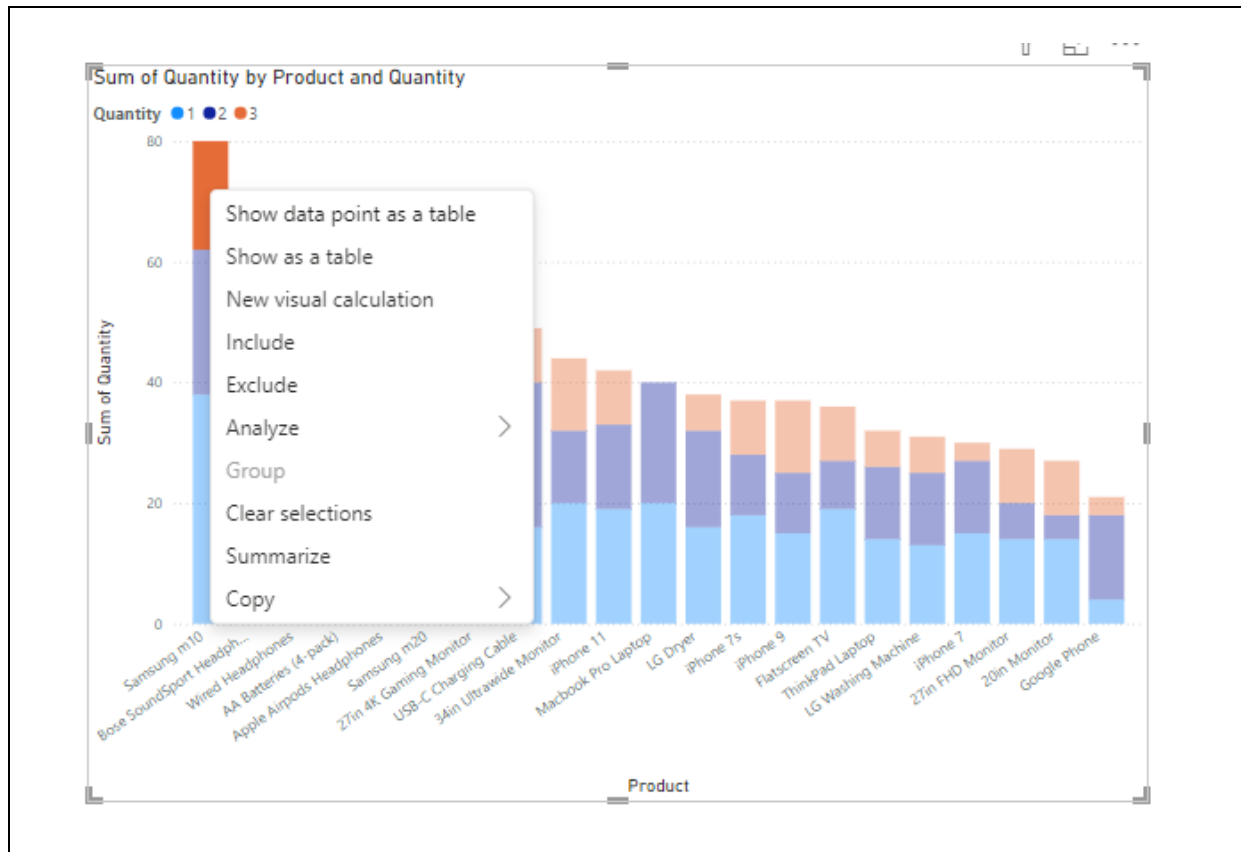
Exclude

- ✓ Removes the selected data points from a visual, hiding irrelevant or unwanted items.
- ✓ Select items (using control) to exclude and compare others.
- ✓ Give right click and select exclude option.
- ✓ To delete the exclude option items, select Filter panel and click on x(close) button.



7. View Data and Export in CSV from Power BI

- ✓ We can View Data and Export in CSV from Power BI.
- ✓ After exporting we can do further analysis.



Back to report

Product	Quantity	Quantity	Customer Name
Samsung m10	3	3	Jaya Chandra
Samsung m10	3	3	Lavanya
Samsung m10	3	3	Lavanya
Samsung m10	3	3	Lavanya
Samsung m10	3	3	Neelima
Samsung m10	3	3	Tarun

Visualizations

- Export data
- Show as a table
- New visual calculation
- Remove
- Sort descending
- Sort ascending
- Sort by