



Chapter 5

Introduction to POWER BI

POWER BI

POWER BI is a unified, scalable platform of Business intelligence.

This platform can be used for self-service or for an enterprise.

POWER BI is a MICROSOFT product.

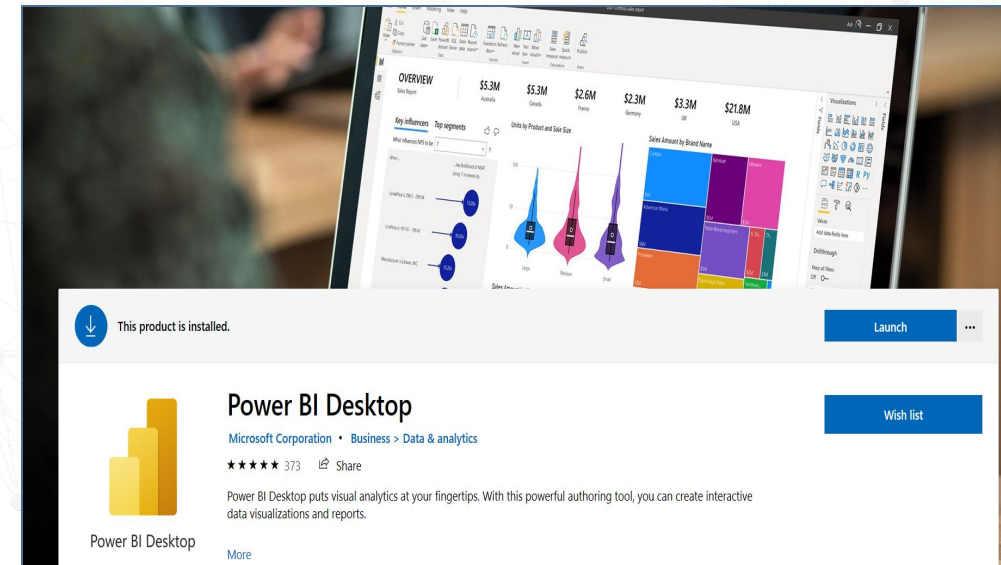
POWER BI is used for data visualization and analysis purpose

POWER BI also support web version.

POWER BI can be easily downloaded from MICROSOFT store.



POWER BI icon



MICROSOFT Store

How to download POWER BI

POWER BI is a MICROSOFT product and can be easily downloaded from Microsoft store. You can also access to download from below link.

POWER BI homepage: <https://powerbi.microsoft.com/en-us/>

POWER BI Desktop: <https://powerbi.microsoft.com/en-us/downloads/>

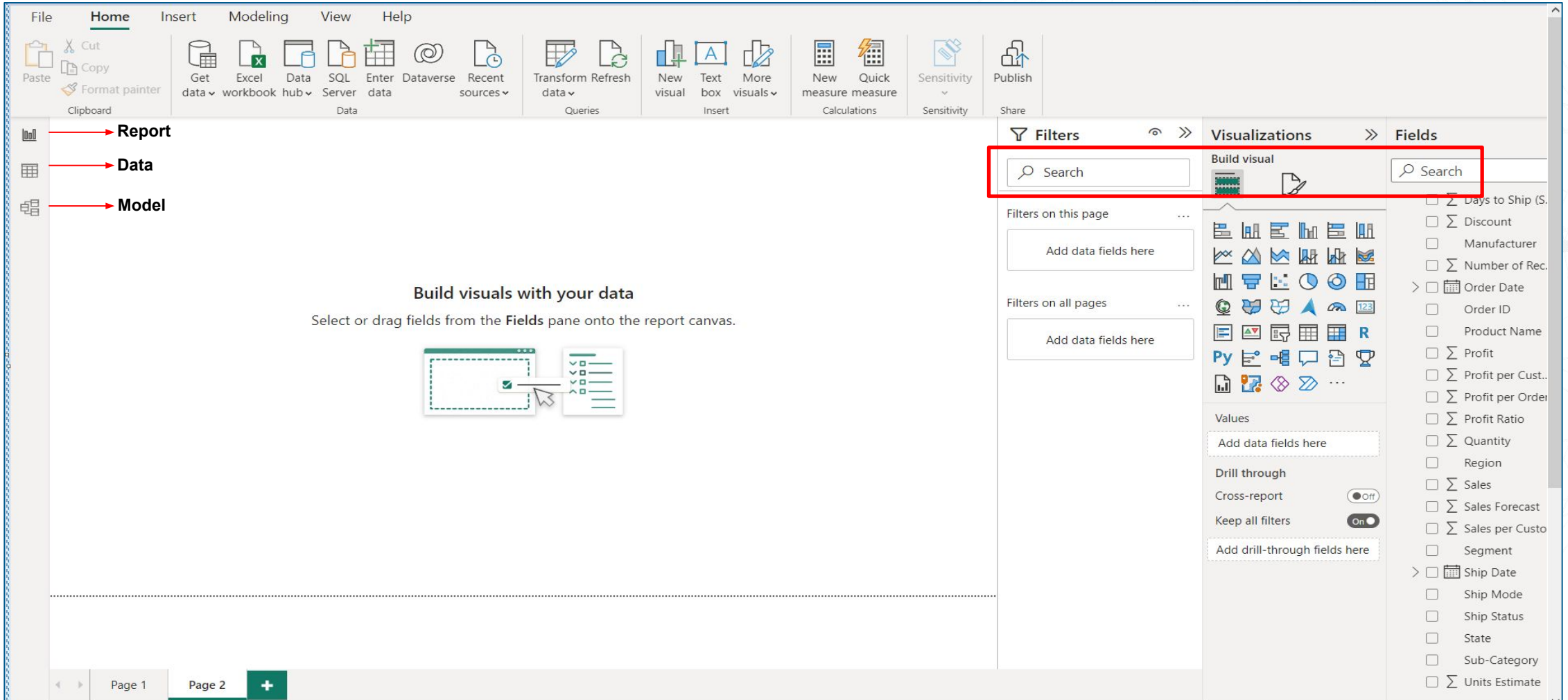
POWER BI web app: <https://app.powerbi.com>

Please note that for:

- POWER BI DESKTOP is free and can be used as per requirement.
- To publish workbooks and reports to web, POWER BI provides web based app.
- Web based app gives 60 days trial period which is good enough for learning purpose.

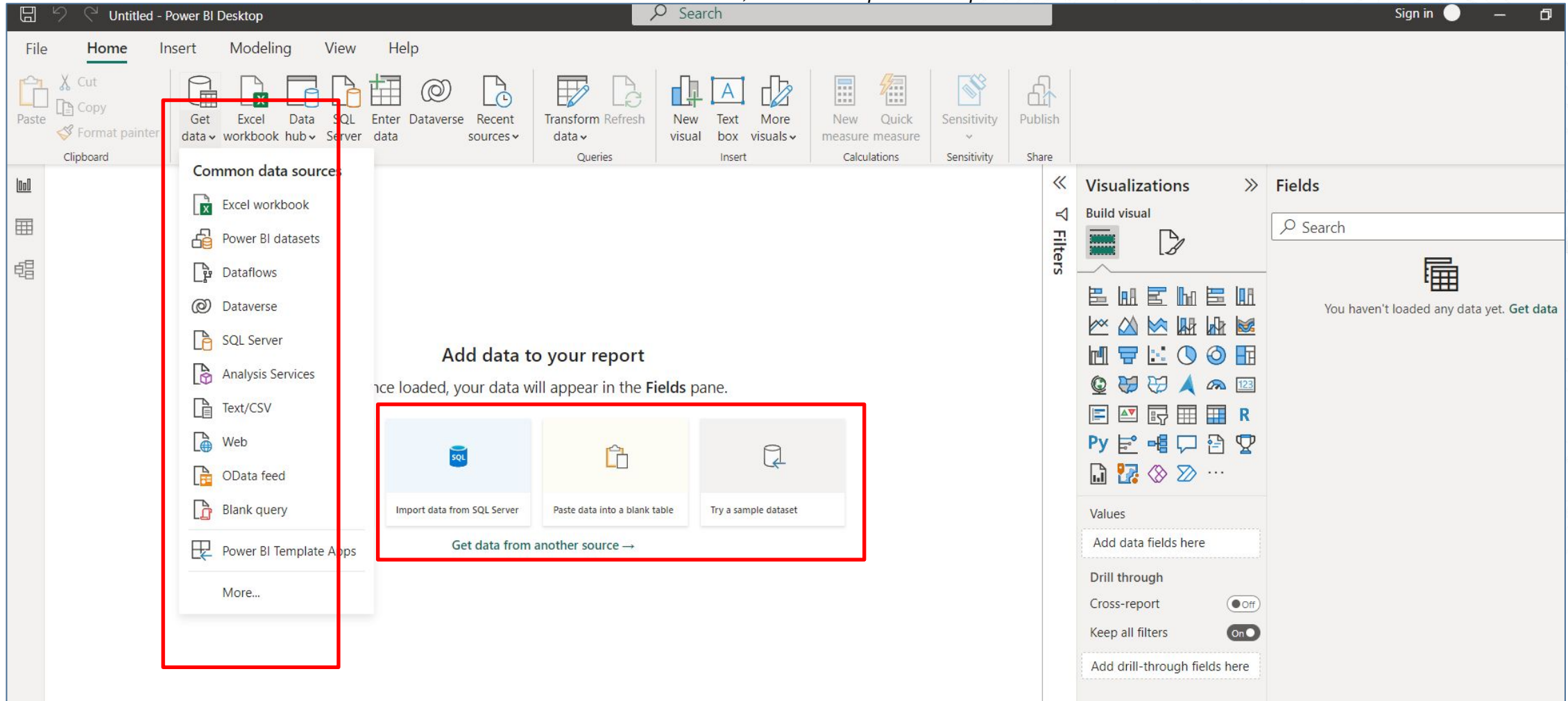
POWER BI Interface (REPORT View)

There are three main interfaces in POWER BI. **REPORT**, **DATA** and **MODEL**. The **REPORT** interface of POWER BI offers you workspace to create visuals. In report view, you can also see **FILTERS**, **VISUALIZATION** and **FIELDS** panel. You can load the dataset in **REPORT** view. Data file will show up in **FIELDS** panel. The left side of window shows icon of **DATA** and **MODEL** view..



POWER BI: Loading the data

POWER BI offers to load data from file, server, web or any other online services. You can directly click on **GET DATA** drop down to see available options. You can also use shortcut icons and give the path of file to be loaded. Once the file is loaded, it will show up in FIELD panel.



POWER BI: Loading the data

After file selection, POWER BI opens up Navigator to confirm if you want to directly use data or make some transformation in query editor. You can also have a preview of the data going to be loaded.

The screenshot shows the Microsoft Power BI Navigator window. On the left, the 'Get data' pane has 'Excel workbook' selected. The 'Navigator' pane shows a folder 'Power bi Dataset.xlsx [1]' with a table 'Master' selected. The 'Master' table preview is displayed on the right, showing columns: Category, City, Country, Customer Name, and Discount. A message at the bottom of the preview states: 'The data in the preview has been truncated due to size limits.' At the bottom right, there are three buttons: 'Load', 'Transform Data', and 'Cancel'.

Category	City	Country	Customer Name	Discount
Office Supplies	Leeds	United Kingdom	Aaron Smayling	
Technology	Leeds	United Kingdom	Aaron Smayling	
Office Supplies	Leeds	United Kingdom	Aaron Smayling	
Office Supplies	Leeds	United Kingdom	Aaron Smayling	
Technology	Leeds	United Kingdom	Aaron Smayling	
Office Supplies	Leeds	United Kingdom	Aaron Smayling	
Technology	Leeds	United Kingdom	Aaron Smayling	
Technology	West Bromwich	United Kingdom	Ellis Ballard	
Office Supplies	West Bromwich	United Kingdom	Ellis Ballard	
Office Supplies	West Bromwich	United Kingdom	Ellis Ballard	
Office Supplies	Le Bouscat	France	Logan Haushalter	
Office Supplies	Le Bouscat	France	Logan Haushalter	
Office Supplies	Le Bouscat	France	Logan Haushalter	
Technology	Le Bouscat	France	Logan Haushalter	
Office Supplies	Le Bouscat	France	Logan Haushalter	
Office Supplies	Strasbourg	France	Kelly Collister	
Technology	Strasbourg	France	Kelly Collister	

POWER BI Interface (Data View)

DATA view offers to see the actual datasheet which is being used. You can change the column data type, name, category or format from here. You can also create new column using formula in this window.

The screenshot displays the Power BI Data View interface. At the top, the 'Column tools' ribbon is active, featuring sections for Structure, Formatting, Properties, Sort, Groups, Relationships, and Calculations. A red box highlights the 'Structure' section, which includes controls for Name, Data type, Format, Summarization, and Data category. Below the ribbon, a table of 'Office Supplies' data is shown. The table has columns for Category, City, Country, Customer Name, Discount, Number of Records, Order Date, Order ID, Manufacturer, Product Name, and Profit. A red box highlights the 'Data' icon in the top-left corner of the table. On the right side, the 'Data' pane is visible, showing a search bar and a list of fields including Master, Category, City, Country, Customer Name, Days to Ship (Actual), Days to Ship (Schedule), Discount, Manufacturer, Number of Records, Order Date, Order ID, Product Name, Profit, Profit per Customer, Profit per Order, Profit Ratio, Quantity, Region, Sales, Sales Forecast, Sales per Customer, and Segment.

Category	City	Country	Customer Name	Discount	Number of Records	Order Date	Order ID	Manufacturer	Product Name	Profit
Office Supplies	Chaville	France	Sam Craven	0	1	Wednesday, May 31, 2017	ES-2017-3284813	BIC Sketch Pad, Water Color	BIC Sketch Pad, Water Color	
Office Supplies	Viroflay	France	Joe Elijah	0	1	Wednesday, November 7, 2018	ES-2018-3937023	Stanley Markers, Fluorescent	Stanley Markers, Fluorescent	
Office Supplies	Viroflay	France	Joe Elijah	0	1	Wednesday, November 7, 2018	ES-2018-3937023	Sanford Highlighters, Fluorescent	Sanford Highlighters, Fluorescent	
Office Supplies	Antony	France	Bill Tyler	0	1	Monday, December 3, 2018	ES-2018-4794612	BIC Pens, Easy-Erase	BIC Pens, Easy-Erase	
Office Supplies	Drancy	France	James Lanier	0	1	Saturday, January 6, 2018	IT-2018-2907373	Binney & Smith Highlighters, Easy-Erase	Binney & Smith Highlighters, Easy-Erase	
Office Supplies	Aulnay-sous-Bois	France	Christopher Conant	0	1	Saturday, June 30, 2018	ES-2018-2689172	Boston Markers, Easy-Erase	Boston Markers, Easy-Erase	
Office Supplies	Paris	France	Gary Hansen	0	1	Tuesday, December 11, 2018	IT-2018-2019502	Boston Highlighters, Easy-Erase	Boston Highlighters, Easy-Erase	
Office Supplies	Conflans-Sainte-Honorine	France	Raymond Buch	0	1	Sunday, March 20, 2016	ES-2016-2280466	Sanford Highlighters, Easy-Erase	Sanford Highlighters, Easy-Erase	
Office Supplies	Vitry-sur-Seine	France	Speros Goranitis	0	1	Saturday, July 14, 2018	ES-2018-5990473	Stanley Pens, Water Color	Stanley Pens, Water Color	
Office Supplies	Vitry-sur-Seine	France	Speros Goranitis	0	1	Saturday, July 14, 2018	ES-2018-5990473	Binney & Smith Sketch Pad, Water Color	Binney & Smith Sketch Pad, Water Color	
Office Supplies	Montesson	France	Jennifer Halladay	0	1	Sunday, August 7, 2016	ES-2016-3246286	BIC Pencil Sharpener, Easy-Erase	BIC Pencil Sharpener, Easy-Erase	
Office Supplies	Sarcelles	France	Cindy Schnelling	0	1	Saturday, December 29, 2018	ES-2018-3625378	Stanley Pens, Easy-Erase	Stanley Pens, Easy-Erase	
Office Supplies	Yerres	France	Natalie Fritzler	0	1	Saturday, October 13, 2018	ES-2018-1343492	BIC Canvas, Blue	BIC Canvas, Blue	
Office Supplies	Paris	France	Adam Shillingsburg	0	1	Saturday, September 23, 2017	ES-2017-5364560	Stanley Sketch Pad, Water Color	Stanley Sketch Pad, Water Color	
Office Supplies	Maisons-Laffitte	France	Shaun Weien	0	1	Monday, October 23, 2017	ES-2017-1990428	BIC Highlighters, Blue	BIC Highlighters, Blue	
Office Supplies	Clichy	France	Toby Ritter	0	1	Friday, April 6, 2018	ES-2018-2624465	BIC Highlighters, Water Color	BIC Highlighters, Water Color	
Office Supplies	Boulogne-Billancourt	France	Allen Goldenen	0	1	Sunday, May 14, 2017	ES-2017-4968432	Sanford Highlighters, Water Color	Sanford Highlighters, Water Color	
Office Supplies	Paris	France	Chris Cortes	0	1	Tuesday, August 28, 2018	ES-2018-3704704	Sanford Highlighters, Fluorescent	Sanford Highlighters, Fluorescent	
Office Supplies	Paris	France	Cindy Chapman	0	1	Saturday, June 23, 2018	Boston Pencil Sharpener, Fluorescent	Boston Pencil Sharpener, Fluorescent	Boston Pencil Sharpener, Fluorescent	
Office Supplies	Paris	France	Chuck Magee	0	1	Thursday, November 30, 2017	ES-2017-4034655	Boston Markers, Blue	Boston Markers, Blue	
Office Supplies	Les Pavillons-sous-Bois	France	Dan Campbell	0	1	Tuesday, April 17, 2018	ES-2018-5931653	Binney & Smith Highlighters, Water Color	Binney & Smith Highlighters, Water Color	
Office Supplies	Villiers-sur-Marne	France	Darren Koutras	0	1	Tuesday, January 20, 2015	ES-2015-1122594	Boston Pencil Sharpener, Water Color	Boston Pencil Sharpener, Water Color	
Office Supplies	Villejuif	France	Emily Phan	0	1	Monday, September 17, 2018	ES-2018-5423169	BIC Markers, Fluorescent	BIC Markers, Fluorescent	
Office Supplies	Paris	France	George Ashbrook	0	1	Saturday, October 13, 2018	ES-2018-3935353	Boston Canvas, Easy-Erase	Boston Canvas, Easy-Erase	
Office Supplies	Vincennes	France	Joy Daniels	0	1	Friday, July 10, 2015	ES-2015-1322522	BIC Pencil Sharpener, Water Color	BIC Pencil Sharpener, Water Color	
Office Supplies	Clichy	France	Kelly Andreada	0	1	Tuesday, May 29, 2018	ES-2018-2265679	Stanley Canvas, Fluorescent	Stanley Canvas, Fluorescent	
Office Supplies	Paris	France	Paul Gonzalez	0	1	Saturday, December 8, 2018	ES-2018-3412389	Stanley Canvas, Easy-Erase	Stanley Canvas, Easy-Erase	

POWER BI Interface (MODEL View)

MODELE mode allows you to check what connections exists in case more than one databases are loaded. If two tables are connected, it is represented by connecting line. The two sided arrow means, connection is bidirectional.

The screenshot displays the Power BI Model View interface. The top ribbon includes tabs for File, Home, and Help, with various icons for data sources, queries, relationships, calculations, security, Q&A, and publishing. On the left, a sidebar contains icons for visualizations, tables, and the Model View icon, which is highlighted with a red box. The main workspace shows two tables: 'Master' and 'Sample - Superstore...'. A bidirectional relationship is established between the 'City' field in the 'Master' table and the 'City' field in the 'Sample - Superstore...' table, indicated by a double-headed arrow. The 'Fields' pane on the right lists the fields for the 'Master' table, including Category, City, Country, Customer Name, Days to Ship (Actual), Days to Ship (Scheduled), Discount, Manufacturer, and Number of Records. The 'Properties' pane on the right shows the properties for the selected 'City' field, including its data type and cardinality.

POWER BI Visuals

*POWER BI offers variety of visual types. You can chose any of them as per your requirement.
The three dots in below picture offers you to download any other visual from web BI store.*

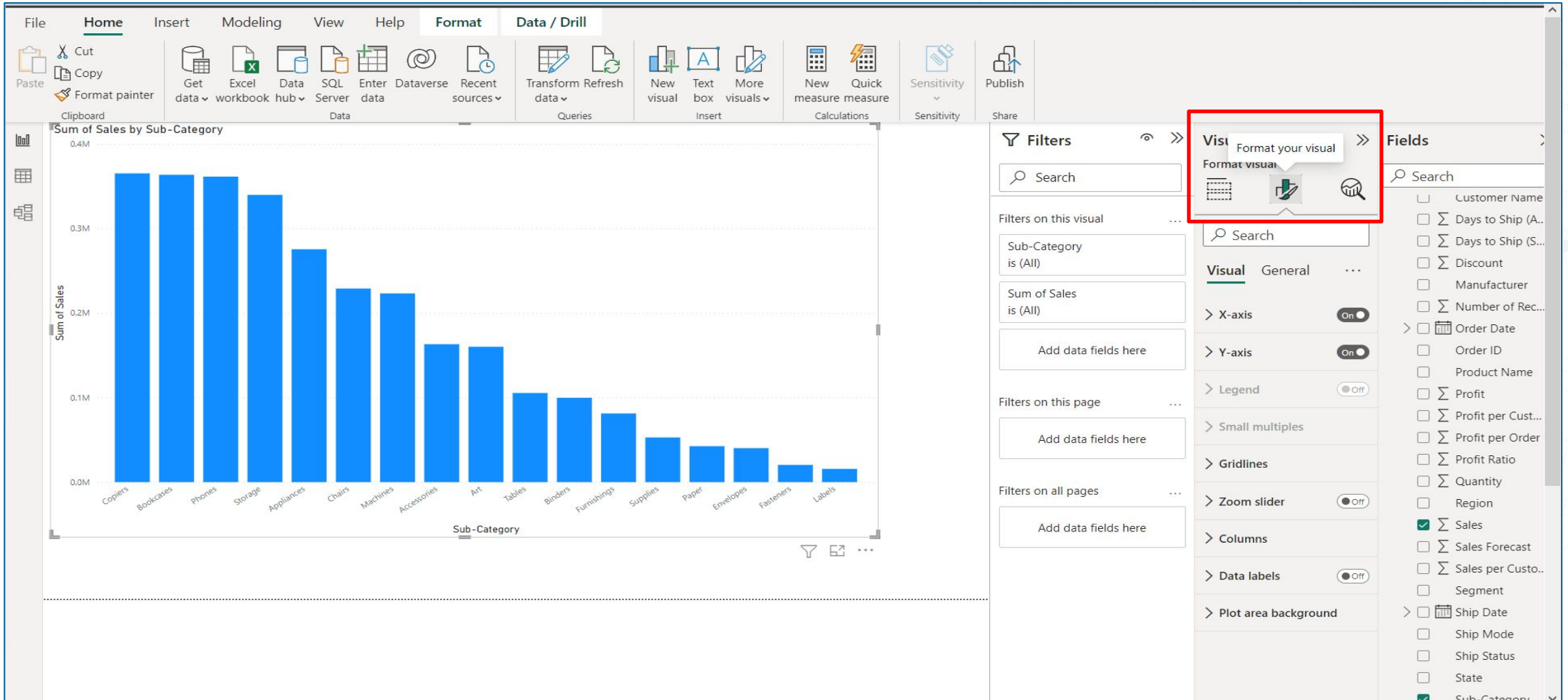
The screenshot displays the Power BI Desktop interface. The main area shows a bar chart titled 'Sum of Sales by Sub-Category' with the y-axis labeled 'Sum of Sales' ranging from 0.0M to 0.4M. The x-axis lists various sub-categories: Copiers, Bookcases, Phones, Storage, Appliances, Chairs, Machines, Accessories, Art, Tables, Binders, Furnishings, Supplies, Paper, Envelopes, Fasteners, and Labels. The 'Visualizations' pane on the right is highlighted with a red box, showing a grid of visualization icons. A red arrow points to the 'Build visual' icon (a document with a plus sign) in the top right corner of the grid, with a callout text 'Get More visuals from web'.

Build visual

Get More visuals from web

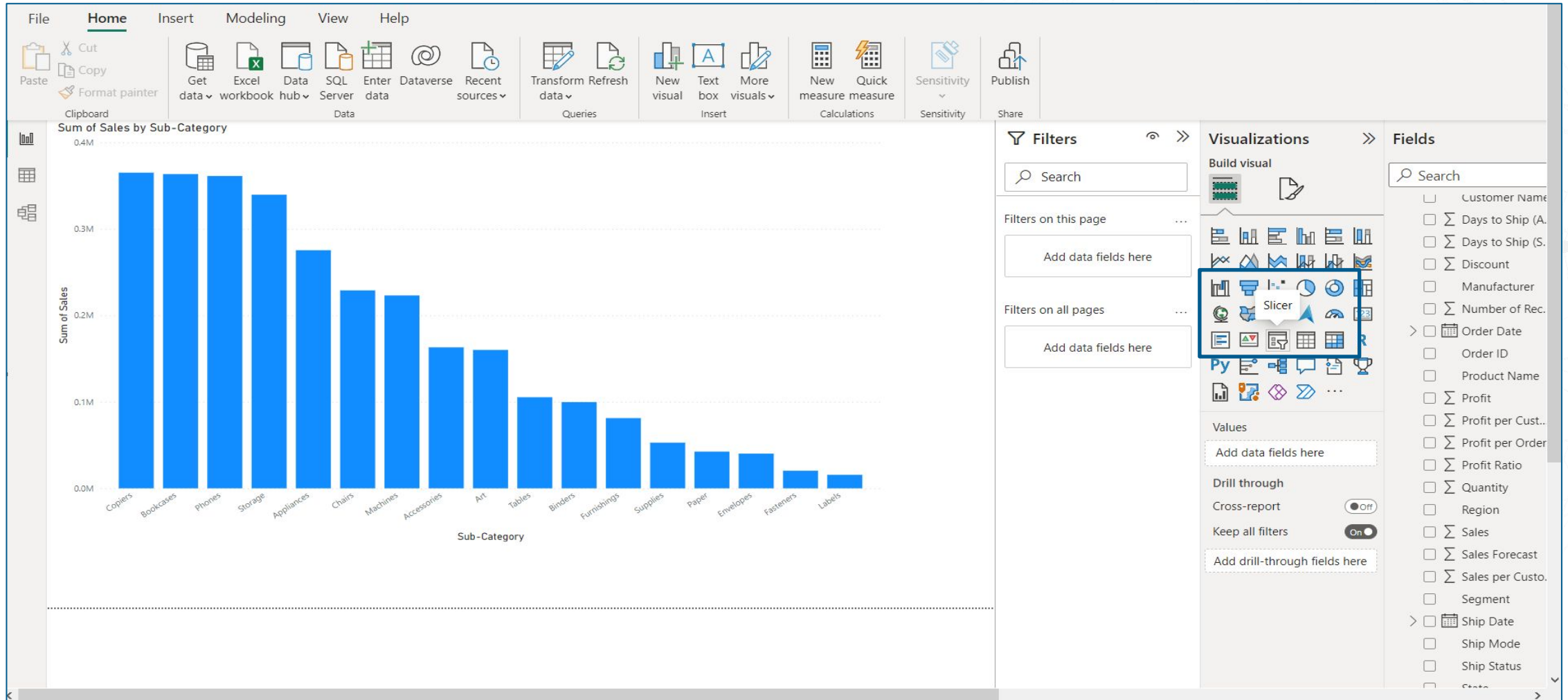
POWER BI Visual Cosmetic

In the **VIUSALIZATION** Pane, the middle icon is of **FORMAT VISUAL**. First you need to select visual, then go to formatting tab. You can do cosmetic settings, title settings, color schemes and data labeling as per your requirement.



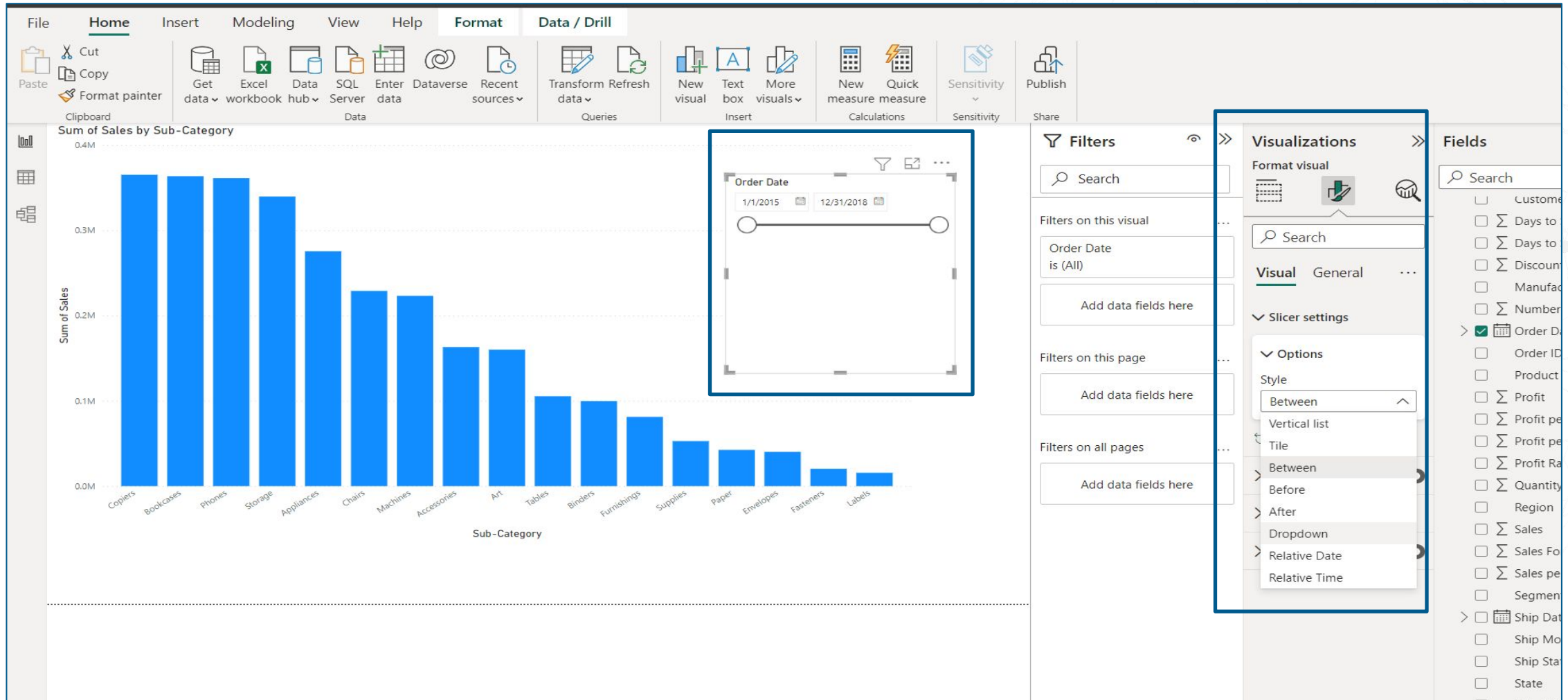
POWER BI Visual SLICER

In the **VISUALIZATION** Pane, you can find the **SLICER** visual. This visual works like a filter and allows you to make selection or range of selection using data fields.



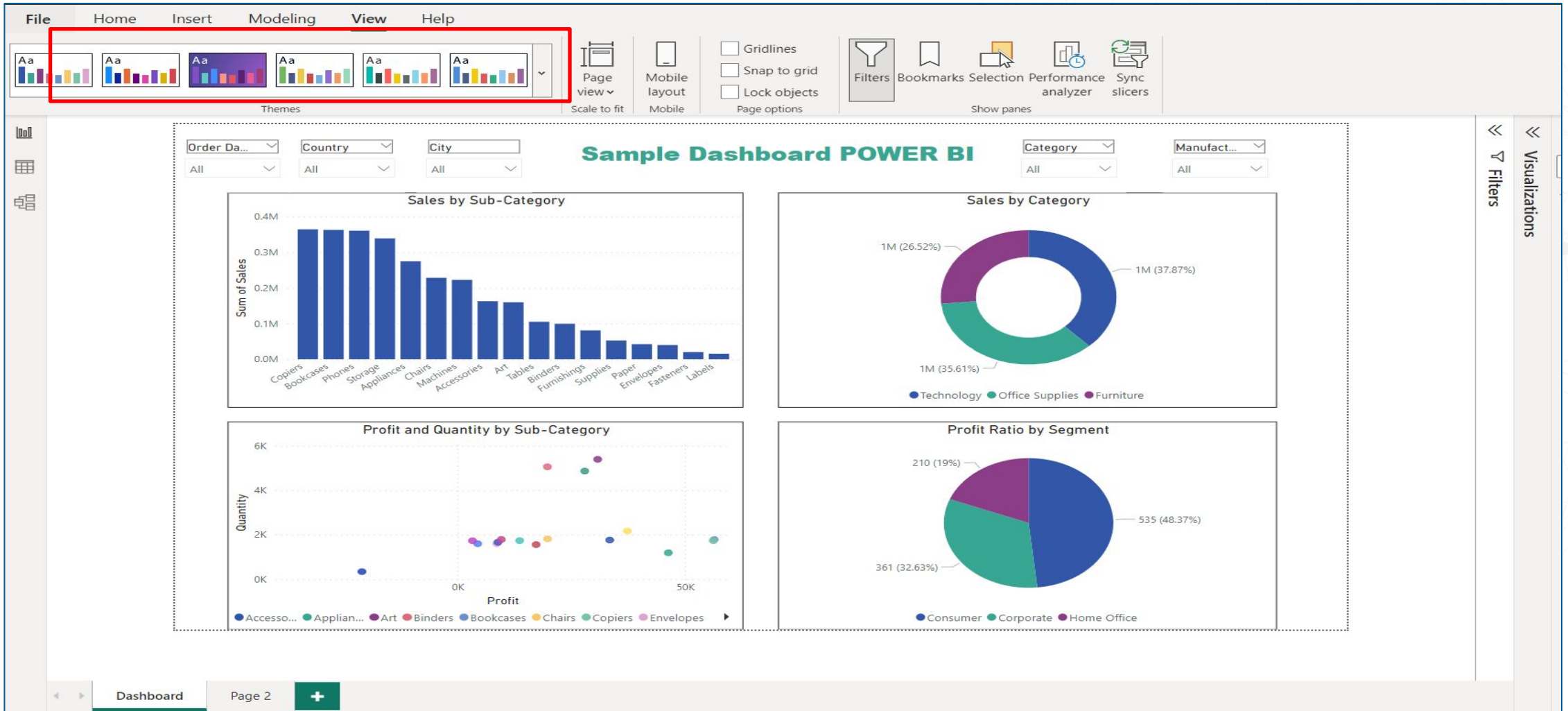
POWER BI Visual SLICER

SLICER settings offers you different styles. Depending on what field you have chosen, you can select any appropriate style from SLICER SETTINGS. .



POWER BI Dashboards

You can create different visuals in workspace and give name to dashboard. POWER BI also offers different themes for your dashboard. THEMES are available in **VIEW** menu.



A close-up, low-angle shot of a person's hand typing on a laptop keyboard. The image has a strong blue tint and is slightly blurred, giving it a moody, digital feel. The hand is positioned over the keyboard, with fingers pressing down on the keys. The lighting is soft, highlighting the texture of the keys and the skin of the hand.

`</talentlabs >`

Thank you