

e\_commerce

# Download power bi

- Power BI suite provides multiple software, connector, and services - Power BI desktop, Power BI service based on SaaS, and mobile Power BI apps available for different platforms. These set of services are used by business users to consume data and build BI reports.
- Power BI desktop app is used to create reports, while Power BI Services (Software as a Service - SaaS) is used to publish the reports, and Power BI mobile app is used to view the reports and dashboards.
- Power BI Desktop is available in both 32-bit and 64-bit versions. To download the latest version, you can use the following link –
- <https://powerbi.microsoft.com/en-us/downloads/>

- have to navigate to “Advanced download options”.
- This is the link to directly download Power BI files –
- <https://www.microsoft.com/en-us/download/details.aspx?id=45331>

- When Power BI is installed, it launches a welcome screen. This screen is used to launch different options related to get data, enrich the existing data models, create reports as well as publish and share reports.

Sign in  Share 

File Home Insert Modeling View Optimize Help

Clipboard Get data from Excel OneLake SQL Server Enter data Dataverse Recent sources Transform data Refresh Queries New visual Text box More visuals Insert New measure Quick measure Calculations Sensitivity Publish Share

Add data to your report  
Once loaded, your data will appear in the Data pane.

Import data from Excel Import data from SQL Server Paste data into a blank table Try a sample semantic model

Get data from another source →

Visualizations Build visual   
  
Values Add data fields here  
Drill through Cross-report  Off Keep all filters  On  
Add drill-through fields here

Filters

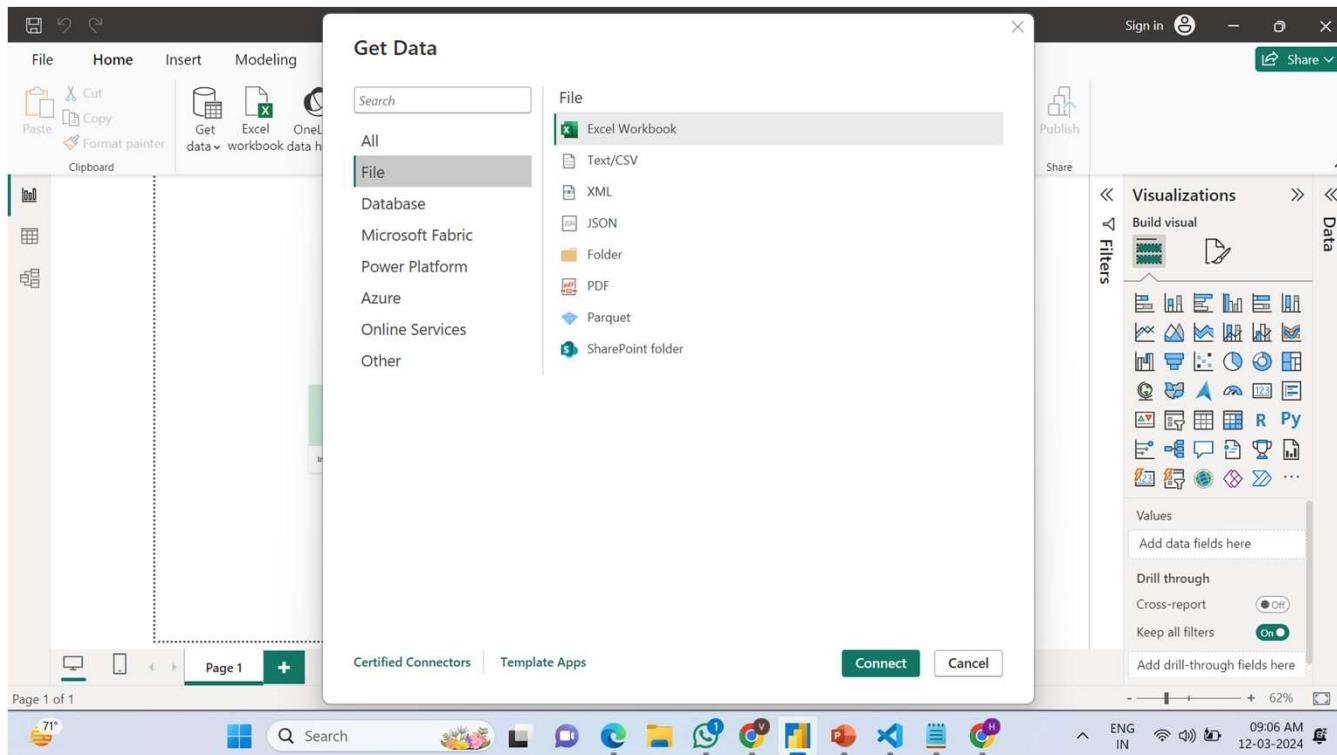
Page 1 +

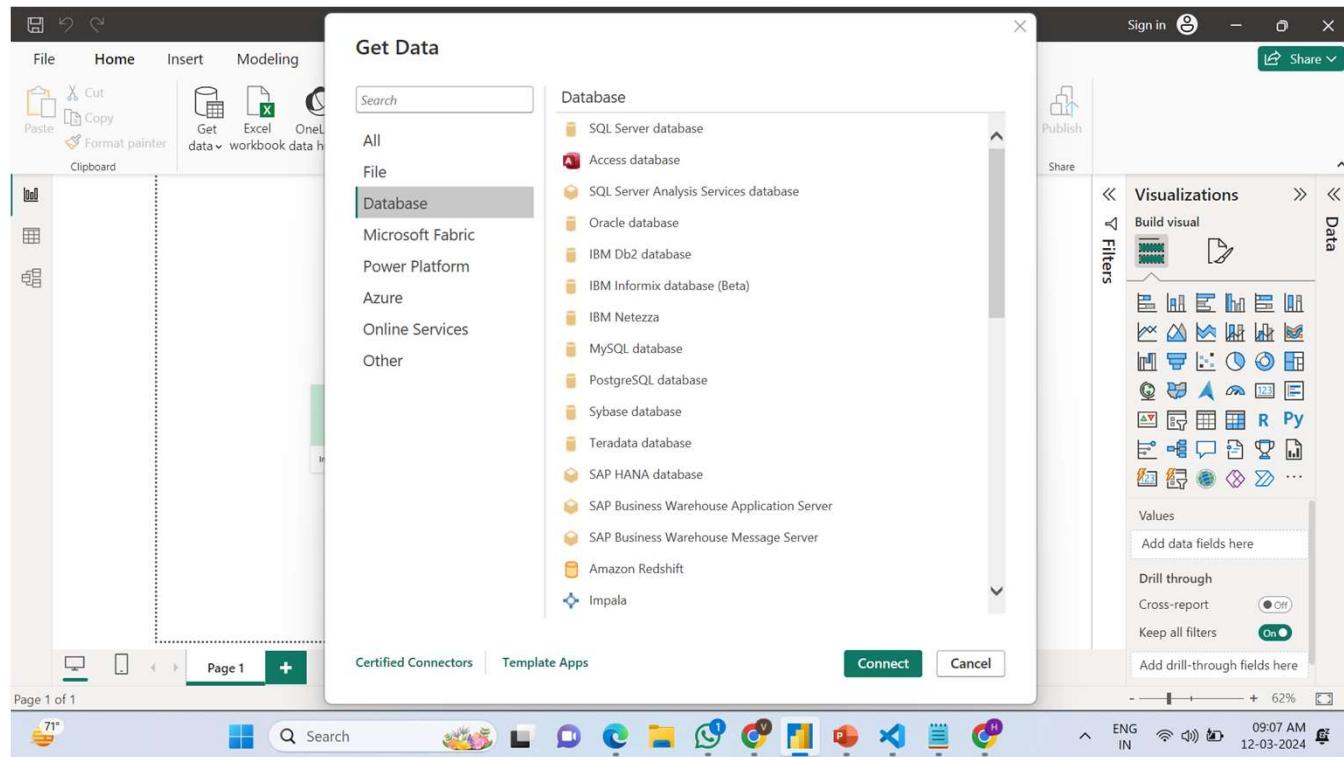
Page 1 of 1

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- To get data in Power BI desktop, you need to click the Get data option in the main screen. It shows you the most common data sources first. Then, click the More option to see a full list of available data sources.

- When you click File, it shows you all flat file types supported in Power BI desktop. To connect to any file type, select the file type from the list and click Connect





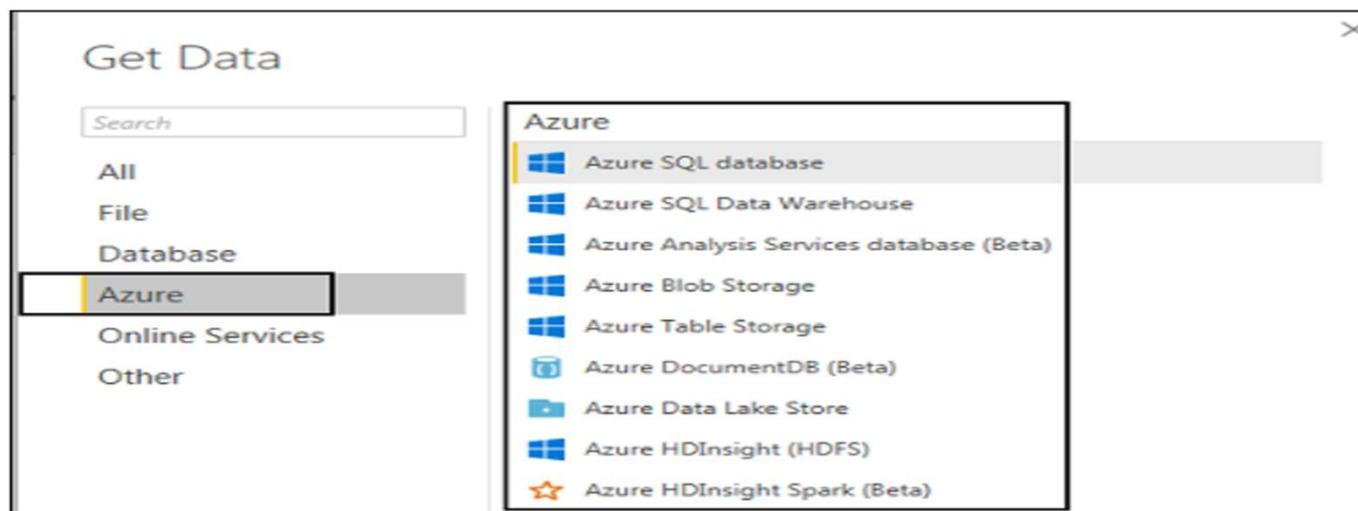
## Import vs DirectQuery

**DirectQuery** option limits the option of data manipulation and the data stays in SQL database. DirectQuery is live and there is no need to schedule refresh as in the Import method.

**Import** method allows to perform data transformation and manipulation. When you publish the data to PBI service, limit is 1GB. It consumes and pushes data into Power BI Azure backend and data can be refreshed up to 8 times a day and a schedule can be set up for data refresh.

## Azure

Using the Azure option, you can connect to the database in Azure cloud. Following screenshot shows the various options available under Azure category.



## Online Services

Power BI also allows you to connect to different online services such as Exchange, Salesforce, Google Analytics, and Facebook.

Following screenshots shown the various options available under Online Services.

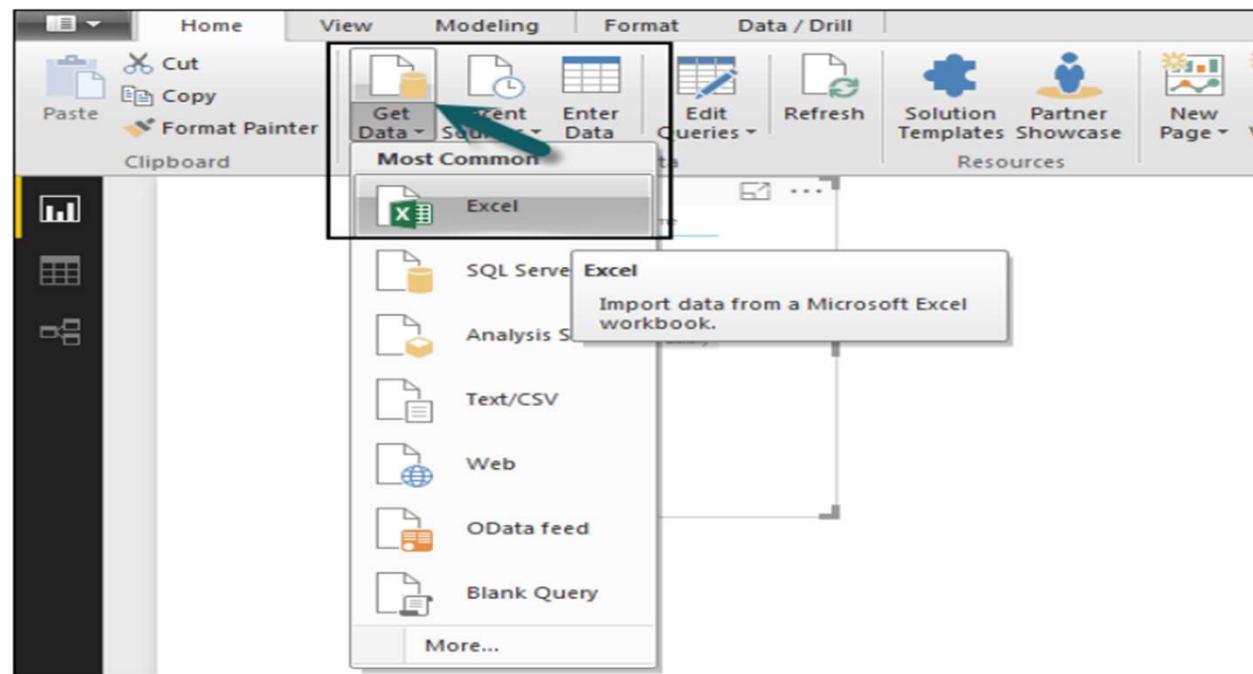
The screenshot shows the 'Get Data' interface in Power BI. On the left, there is a sidebar with a 'Search' input field and a list of categories: All, File, Database, Azure, Online Services (which is highlighted with a yellow border), and Other. To the right, a main pane displays a list titled 'Online Services' with the following items:

- SharePoint Online List
- Microsoft Exchange Online
- Dynamics 365 (online)
- Dynamics 365 for Financials (Beta)
- Common Data Service (Beta)
- Azure Enterprise (Beta)
- Visual Studio Team Services (Beta)
- Salesforce Objects
- Salesforce Reports

A vertical scroll bar is visible on the right side of the main pane.

- Power BI vs Tableau
- Tableau is considered as one of the leading tools in the BI market. Power BI is considered as an emerging tool in close competition with Tableau because of its backend data manipulation features and connectivity with the list of data sources. Tableau is one of the best data visualization tools in the market and is used by medium and large enterprises. Power BI is closely integrated with Office 365 suite, and hence it is compatible other sources such as SharePoint.

To create data model in Power BI, you need to add all data sources in Power BI new report option. To add a data source, go to the Get data option. Then, select the data source you want to connect and click the Connect button.





Once you add a data source, it is presented on the right side bar. In the following image, we have used 2 xls file to import data - Customer and Product.

The screenshot shows the Microsoft Power BI desktop application interface. On the left, there's a data view pane displaying two Excel files: 'Customer' and 'Product'. The 'Customer' file contains data with columns 'Cust\_Name', 'Prod\_Id', and 'Phone'. The 'Product' file contains data with columns 'Prod\_Id' and 'Prod\_Name'. The main workspace is currently empty, showing a blank area for creating visualizations. On the right side, there are two expandable sections: 'Visualizations' and 'Fields'. The 'Fields' section is expanded, showing a list of fields from both data sources: 'Sheet1', 'Cust\_Id', 'Cust\_Name', 'Prod\_Id', 'Prod\_Name', 'Sheet1 (2)', 'Prod\_ID', and 'Prod\_Name'. Under 'Visual level filters', three filters are applied: 'Cust\_Name(All)', 'Prod\_(All)', and 'Prod\_Name(All)'. Under 'Page level filters', no filters are present.

In Power BI on the left side of the screen, you have the following three tabs –

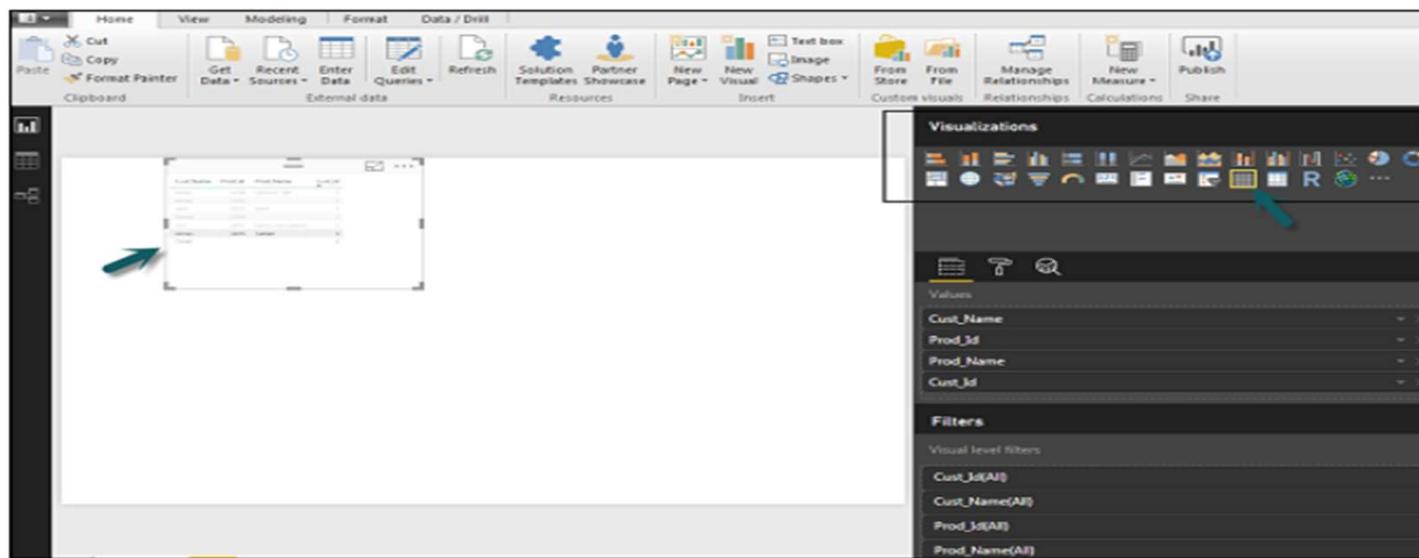
- Report
- Data
- Relationships

The screenshot shows the Microsoft Power BI desktop application window. The ribbon at the top has several tabs: Home, View, Modeling, Format, Data / Drill, Visual tools, and others partially visible. The 'Data / Drill' tab is currently selected. On the far left of the ribbon, there is a vertical bar containing icons for Paste, Cut, Copy, Format Painter, and Clipboard. A teal arrow points to the 'Clipboard' icon. Below the ribbon, the main workspace displays a table with four columns: Cust\_Name, Prod\_Id, Prod\_Name, and Cust\_Id. The data rows are: Andy (Prod\_Id 1290, Prod\_Name Lenovo Tab, Cust\_Id 1), Anna (Prod\_Id 1201, Prod\_Name ipad, Cust\_Id 1), Jack (Prod\_Id 1102, Prod\_Name ipad, Cust\_Id 1), James (Prod\_Id 1209, Prod\_Name Samsung Galaxy, Cust\_Id 1), Jim (Prod\_Id 1207, Prod\_Name Samsung Galaxy, Cust\_Id 1), and Jones (Prod\_Id 1105, Prod\_Name Tablet, Cust\_Id 1). A summary row 'Total' is shown with Prod\_Id 6.

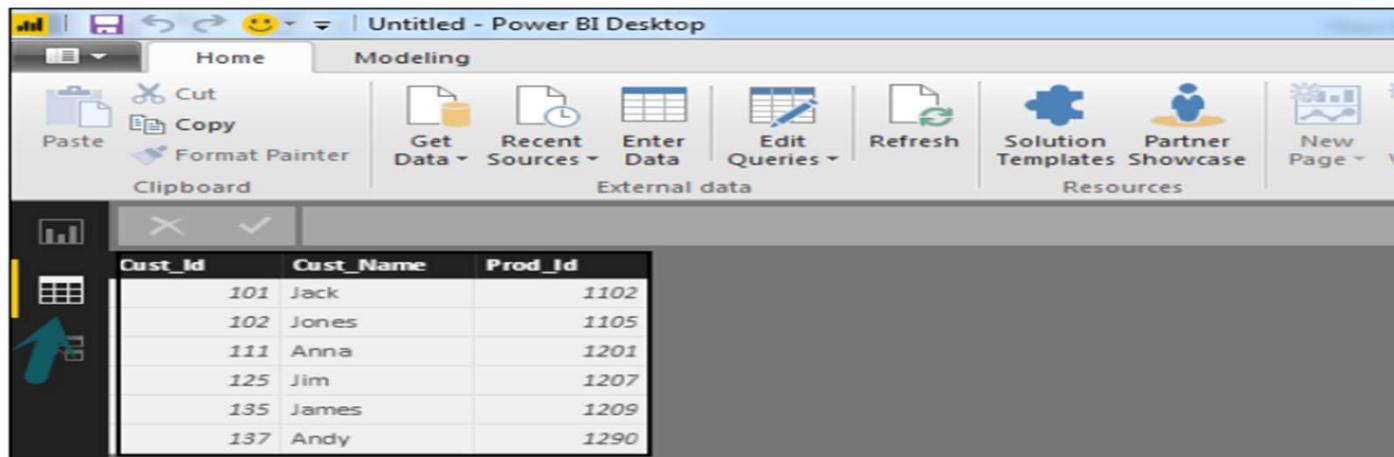
| Cust_Name    | Prod_Id | Prod_Name      | Cust_Id  |
|--------------|---------|----------------|----------|
| Andy         | 1290    | Lenovo Tab     | 1        |
| Anna         | 1201    | ipad           | 1        |
| Jack         | 1102    | ipad           | 1        |
| James        | 1209    | Samsung Galaxy | 1        |
| Jim          | 1207    | Samsung Galaxy | 1        |
| Jones        | 1105    | Tablet         | 1        |
| <b>Total</b> |         |                | <b>6</b> |



When you navigate to the Report tab, you can see a dashboard and a chart selected for data visualization. You can select different chart types as per your need. In our example, we have selected a Table type from available Visualizations.



When you go to the Data tab, you can see all the data as per the defined Relationship from the data sources.



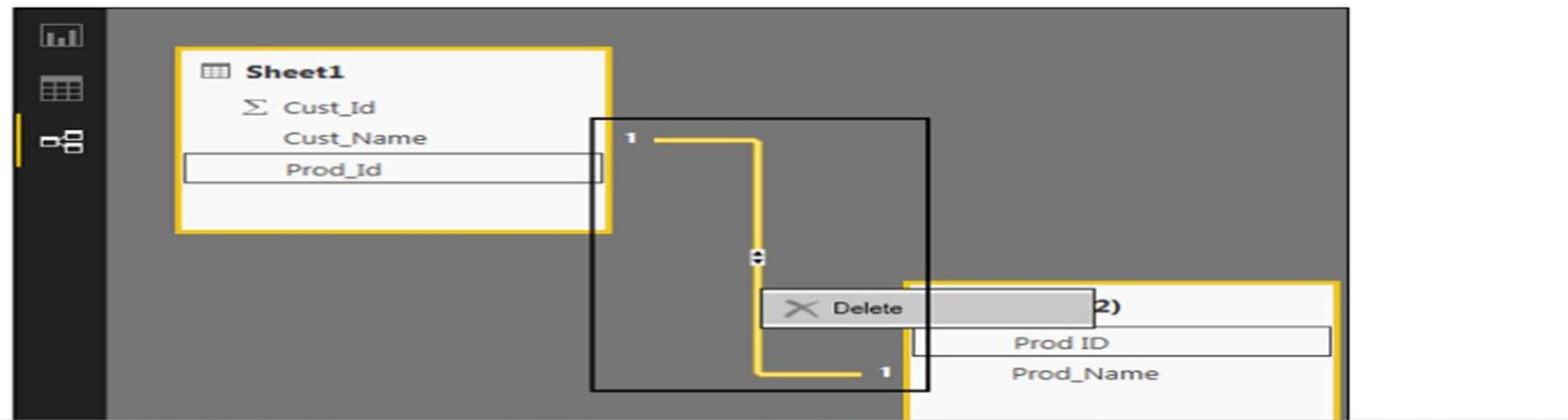
The screenshot shows the Power BI Desktop interface with the 'Modeling' tab selected. A data grid is displayed with the following data:

| Cust_Id | Cust_Name | Prod_Id |
|---------|-----------|---------|
| 101     | Jack      | 1102    |
| 102     | Jones     | 1105    |
| 111     | Anna      | 1201    |
| 125     | Jim       | 1207    |
| 135     | James     | 1209    |
| 137     | Andy      | 1290    |

In the Relationship tab, you can see the relationship between data sources. When you add multiple data sources to Power BI visualization, the tool automatically tries to detect the relationship between the columns. When you navigate to the Relationship tab, you can view the relationship. You can also create a Relationship between the columns using Create Relationships option.

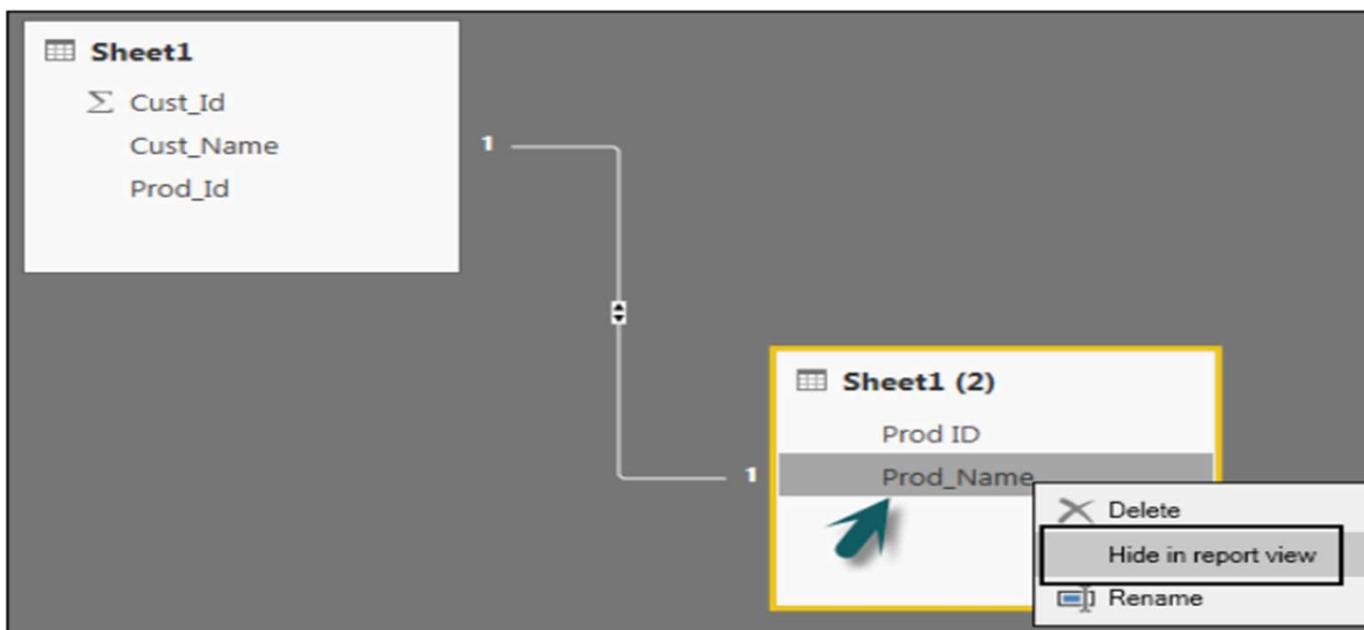


You can also add and remove relationships in data visualization. To remove a relationship, you have to right-click and select the "Delete" option. To create a new "Relationship", you just need to drag and drop the fields that you want to link between the data sources.



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You can also use the Relationship view to hide a particular column in the report. To hide a column, right-click on the column name and select the "Hide in report view" option.



## Creating Calculated Columns

You can create calculated columns in Power BI by combining two or more elements of the existing data. You can also apply calculation on an existing column to define a new metric or combine two columns to create one new column.

You can even create a calculated column to establish a relationship between the tables and it can also be used to setup a relationship between two tables.

To create a new calculated column, navigate to Data View tab on the left side of the screen and then click Modeling.

The screenshot shows the Power BI desktop application. The ribbon at the top has the 'Modeling' tab selected. The 'Clipboard' section contains icons for Paste, Cut, Copy, Format Painter, and a 'Clipboard' button. The 'External data' section includes Get Data, Recent Sources, Enter Data, Edit Queries, Refresh, Solution Templates, Partner Showcase, and New Page. The main area displays a table with three columns: Cust\_Id, Cust\_Name, and Prod\_Id. The table has five rows with data: (101, Jack, 1102), (102, Jones, 1105), (111, Anna, 1201), (125, Jim, 1207), and (135, James, 1209). A green arrow points from the 'Clipboard' icon in the ribbon to the 'Clipboard' button in the table's context menu. Another green arrow points from the 'Clipboard' button in the table's context menu to the 'Clipboard' button in the ribbon.

| Cust_Id | Cust_Name | Prod_Id |
|---------|-----------|---------|
| 101     | Jack      | 1102    |
| 102     | Jones     | 1105    |
| 111     | Anna      | 1201    |
| 125     | Jim       | 1207    |
| 135     | James     | 1209    |

When you navigate to the Modeling tab, you can see a New Column option at the top of the screen. This also opens the formula bar, where you can enter DAX formula to perform calculation. DAX- Data Analysis Expression is a powerful language also used in Excel to perform calculations. You can also rename the column by changing the Column text in the formula bar.

The screenshot shows the Power BI Desktop interface with the 'Modeling' tab selected in the ribbon. A 'New Column' dialog box is open, overlaid on the main data grid. The dialog has a 'Column =' input field and a 'Column' dropdown menu. The main data grid below shows columns for Cust\_Id, Cust\_Name, Prod\_Id, and a newly created 'Column'. The 'Column' button in the dialog is highlighted with a yellow arrow. The data grid contains the following rows:

| Cust_Id | Cust_Name | Prod_Id | Column |
|---------|-----------|---------|--------|
| 101     | Jack      | 1102    |        |
| 102     | Jones     | 1105    |        |
| 111     | Anna      | 1201    |        |
| 125     | Jim       | 1207    |        |
| 135     | James     | 1209    |        |
| 137     | Andy      | 1290    |        |

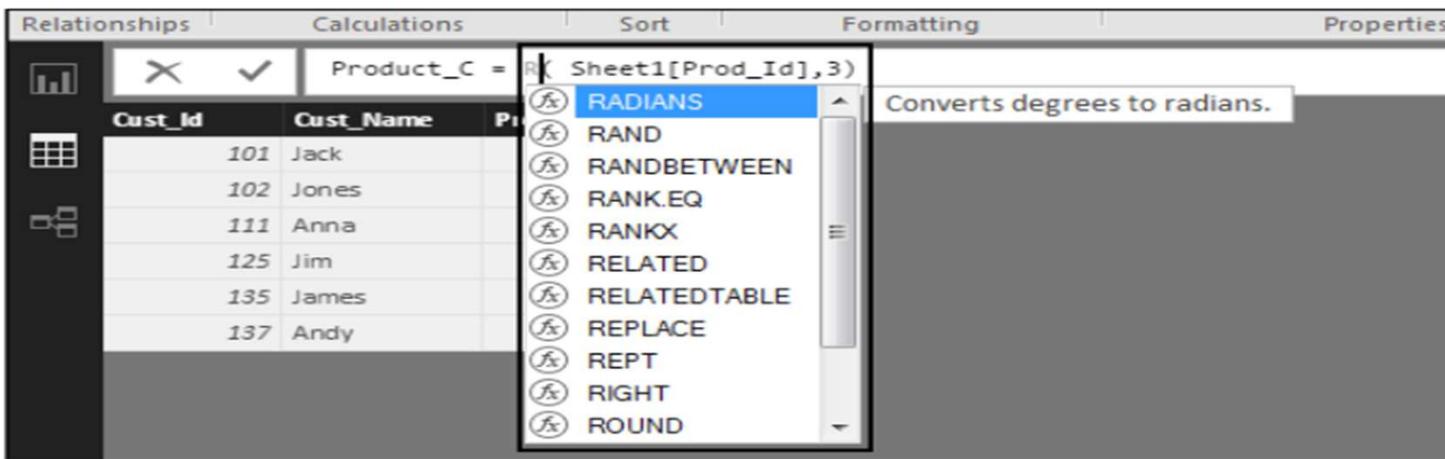
In the following example, let us create a new column: Product Code (Product\_C), which is derived from the last three characters of Prod\_Id column. Then, write the following formula –

```
Product_C = RIGHT( Sheet1[Prod_Id],3)
```

The screenshot shows the Microsoft Power BI Data Editor interface. The ribbon at the top has tabs for Home, Modeling, and Calculations. In the Calculations tab, there is a 'New Column' button. The column properties pane on the right shows 'Data type: Text', 'Format: Text', 'Home Table: ', 'Data Category: Uncategorized', and 'Default Summarization: Do not summarize'. A formula bar at the top displays the formula `Product_C = RIGHT( Sheet1[Prod_Id],3)`. Below the formula bar is a table with four columns: Cust\_Id, Cust\_Name, Prod\_Id, and Product\_C. The Product\_C column contains the result of the formula applied to the Prod\_Id values.

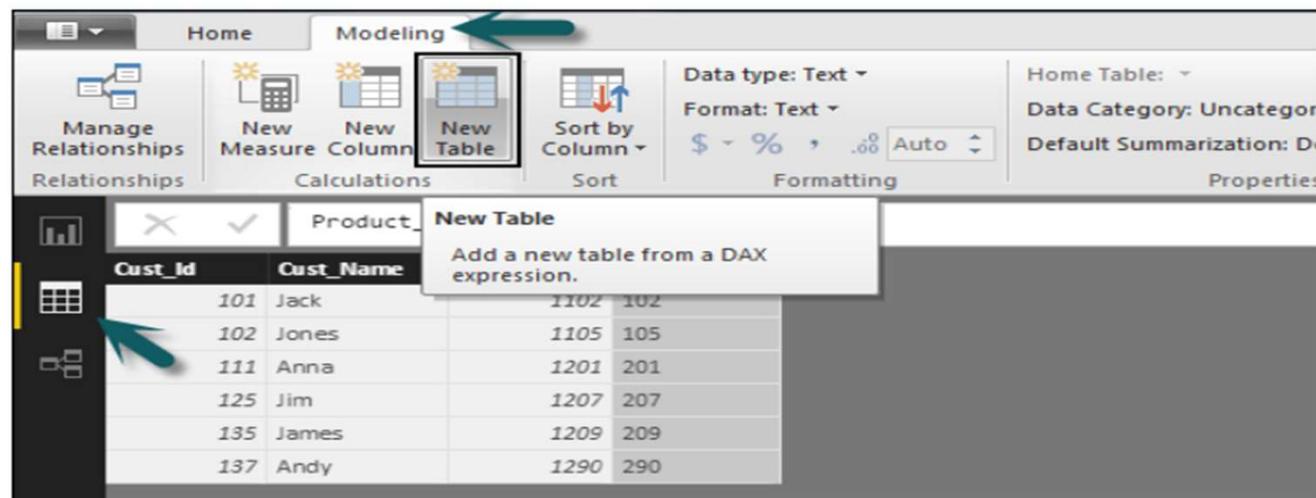
| Cust_Id | Cust_Name | Prod_Id | Product_C |
|---------|-----------|---------|-----------|
| 101     | Jack      | 1102    | 102       |
| 102     | Jones     | 1105    | 105       |
| 111     | Anna      | 1201    | 201       |
| 125     | Jim       | 1207    | 207       |
| 135     | James     | 1209    | 209       |
| 137     | Andy      | 1290    | 290       |

A long list of formulas is also provided that you can use for creating calculated columns. You have to enter the first character of formula to be used in calculations as shown in the following screenshot.



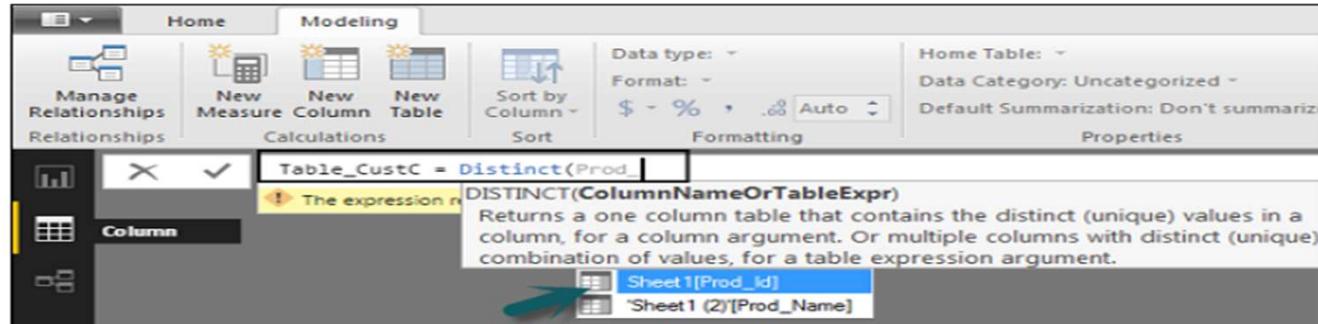
## Creating Calculated Tables

You can also create a new calculated table in data modeling in Power BI. To create a new table, navigate to the Data View tab on the left side of the screen, and then go to the Modeling option at the top of the screen.



DAX expression is used to create the new table. You have to enter the name of a new table on the left side of the equal sign and DAX formula to perform the calculation to form that table on the right. When the calculation is complete, the new table appears in the Fields pane in your model.

In the following example, let us define a new table - Table\_CustC that returns a one column table containing unique values in a column in another table.

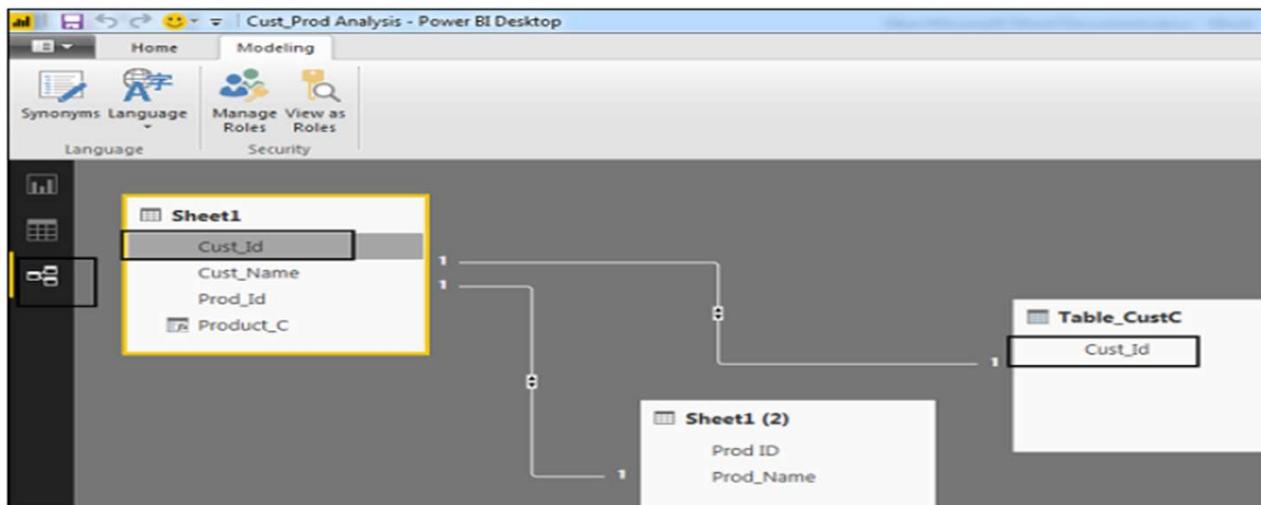


A new table is added under the "Fields" section in Power BI screen as shown in the following screenshot. Once the calculated column and calculated tables are created as per your requirement, you can use the fields in the Report tab in Power BI.

To add these objects, you have to select a checkbox and a relationship is automatically detected if possible. If not, then you can drag the columns that you want to connect.

Requirements, you can use the fields in the Report tab in Power BI.

To add these objects, you have to select a checkbox and a relationship is automatically detected if possible. If not, then you can drag the columns that you want to connect.



To view the report, you navigate to the Report tab and you can see both "Calculated columns" and fields from the new "Calculated table" in the report view.



To view the report, you navigate to the Report tab and you can see both “Calculated columns” and fields from the new “Calculated table” in the report view.

The screenshot shows the Power BI Analysis view interface. The main area displays a table visualization with columns for Product ID, Product Name, Count of Cust\_ID, and Product LC. The Fields pane on the right lists various fields and calculated columns, including Cust\_ID, Cust\_Name, Prod\_ID, Prod\_Name, Count of Cust\_ID, and Product LC. The Fields pane also shows filters for Count of Cust\_ID, Cust\_Name, Prod\_ID, and Prod\_Name. The ribbon at the top has tabs for Home, View, Modeling, Format, Data / DAX, and Visual Tools. The status bar at the bottom indicates 'Sheet1' and 'Page 1'.

## Managing Time-Based Data

Power BI allows to drill through time-based data by default. When you add a date field in your analysis and enable drill on your data visualization, it takes you to the next level of time-based data.

Let us consider we have added Time-based table in Power BI visualization. We have added Revenue and Year column in our report.

## Managing Time-Based Data

Power BI allows to drill through time-based data by default. When you add a date field in your analysis and enable drill on your data visualization, it takes you to the next level of time-based data.

Let us consider we have added Time-based table in Power BI visualization. We have added Revenue and Year column in our report.

The screenshot illustrates the Power BI interface for managing time-based data. At the top, there is a small Excel-like data grid:

|   | A       | B    | C       | D       | E | F | G | H | I |
|---|---------|------|---------|---------|---|---|---|---|---|
| 1 | Prod ID | Year | Quarter | Revenue |   |   |   |   |   |
| 2 | 1101    | 2017 | 1       | 10000   |   |   |   |   |   |
| 3 | 1102    | 2016 | 1       | 25000   |   |   |   |   |   |
| 4 | 1105    | 2017 | 2       | 15000   |   |   |   |   |   |
| 5 | 1207    | 2016 | 3       | 20000   |   |   |   |   |   |
| 6 | 1290    | 2016 | 4       | 14000   |   |   |   |   |   |

Below this is a Power BI visual, specifically a matrix or table view, showing sales data by customer, product, and year. A green arrow points to the "Year" column header in the visual, indicating it is the active time-based dimension.

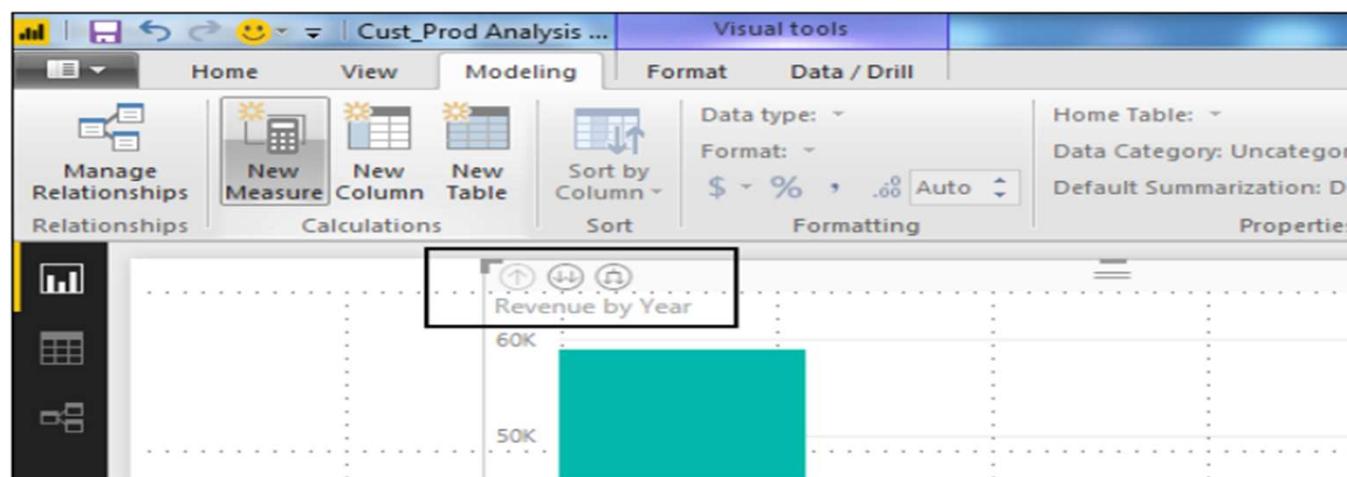
The Power BI ribbon at the top includes tabs for Home, Insert, Page, and View.

The right side of the interface features the "Fields" pane, which lists all available fields from the data source. The "Year" field is checked under the "Selected Fields" section, and the "Revenue" field is also checked under the "Values" section. Other checked fields include Cust\_Name, Prod\_Id, and Prod\_Name.

The "Visualizations" pane shows various chart and report options.

We can enable the drill feature in visualizations using the option at the top. Once we enable the drill feature and click the bars or lines in the chart, it drills down to the next level of time hierarchy. **Example:** Years → Quarters → Months.

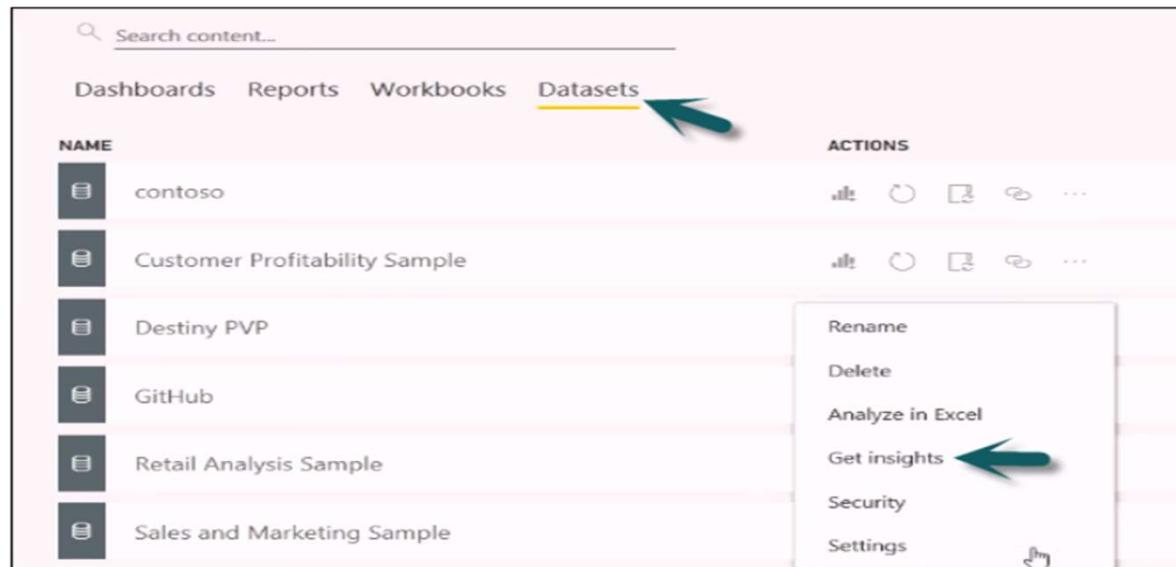
We can also use Go to the next level in the hierarchy option to perform a Drill.



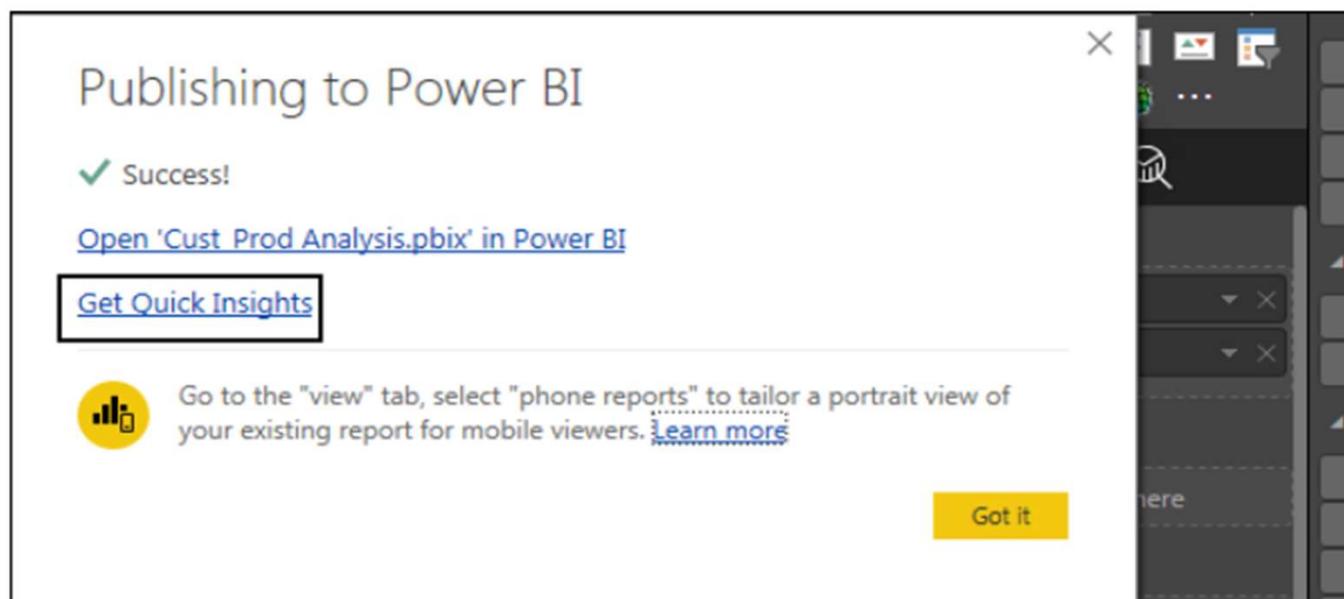
# Exploring Different Datasets

## Exploring Different Datasets

Power BI tool provides a lot of options to explore the datasets. When you are working on your BI report or dashboards, you can use Power BI look for quick insights. Navigate to the datasets section on the left side of the tool UI, click the 3 dots (...) and click Get Insights.

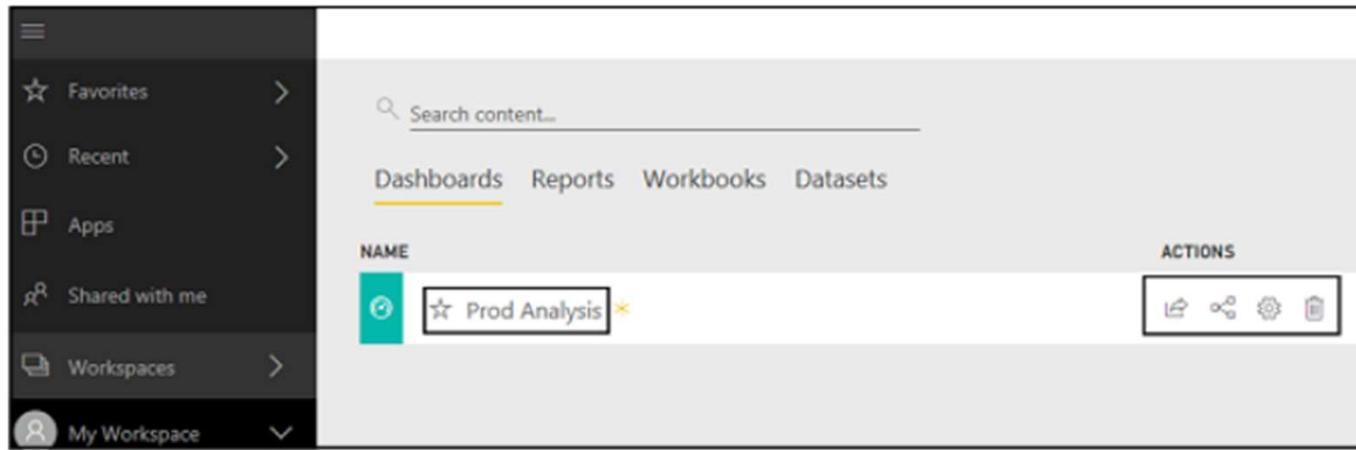


When you publish a report to Power BI service, you also get an option of Quick Insights on the first page.



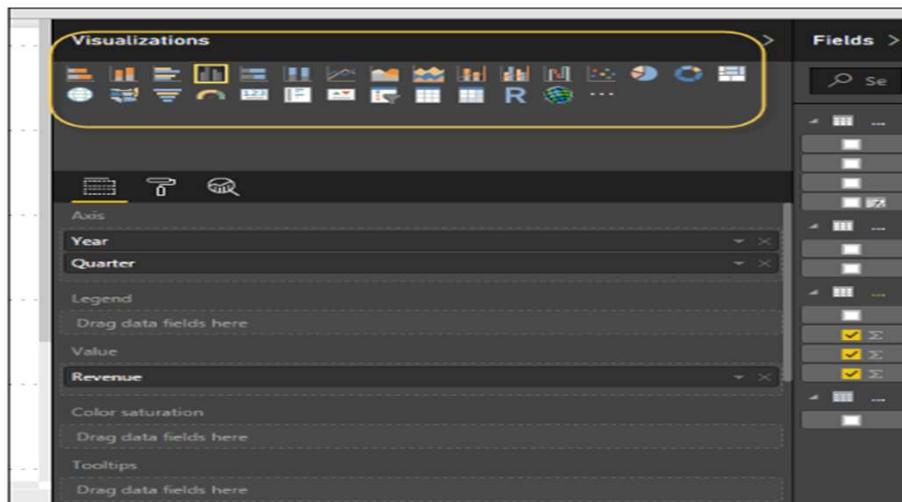
Once you click the Pin button, you will get a confirmation that your visualization is “Pinned” to the dashboard. You can click My Workspace and check the dashboard.

Once your dashboard is created, you can use different options to configure the dashboard.



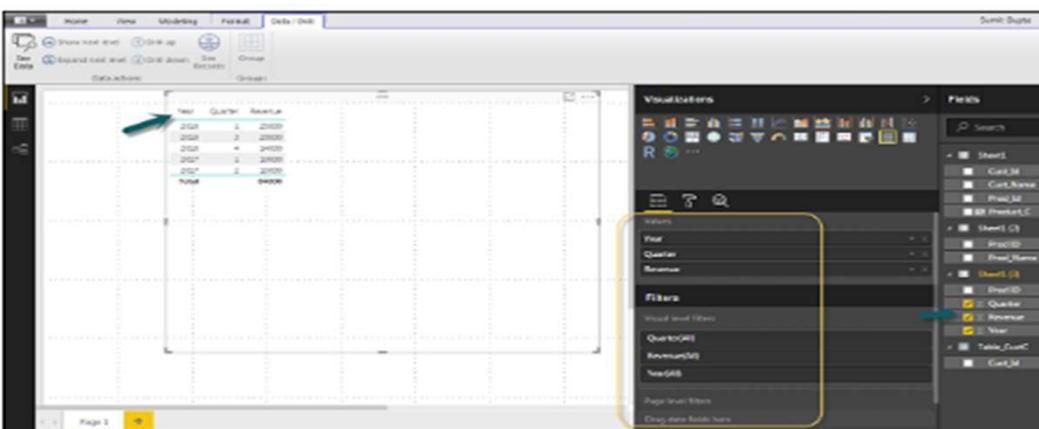
## Creating Simple Visualizations

Visualizations are used to effectively present your data and are the basic building blocks of any Business Intelligence tool. Power BI contains various default data visualization components that include simple bar charts to pie charts to maps, and also complex models such as waterfalls, funnels, gauges, and many other components.



In Power BI, you can create visualization in two ways. First is by adding from the right side pane to Report Canvas. By default, it is the table type visualization, which is selected in Power BI. Another way is to drag the fields from right side bar to the axis and value axis under Visualization. You can add multiple fields to each axis as per the requirement.

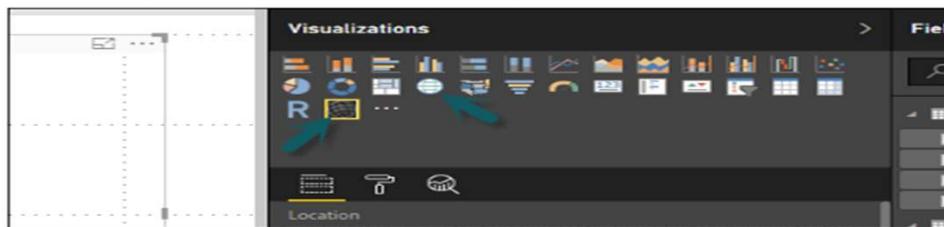
In Power BI, you can create visualization in two ways. First is by adding from the right side pane to Report Canvas. By default, it is the table type visualization, which is selected in Power BI. Another way is to drag the fields from right side bar to the axis and value axis under Visualization. You can add multiple fields to each axis as per the requirement.



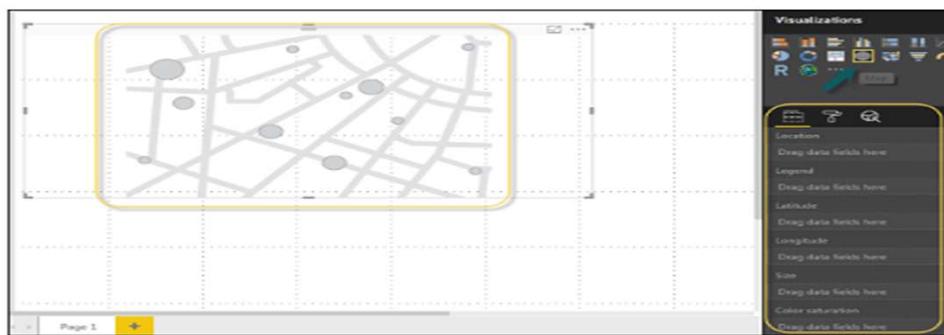
In Power BI, it is also possible to move your visualization on the reporting canvas by clicking and then dragging it. You can also switch between different type of charts and visualizations from the Visualization pane. Power BI attempts to convert your selected fields to the new visual type as closely as possible.

## Creating Map Visualizations

In Power BI, we have two types of map visualization - bubble maps and shape maps. If you want to create a bubble map, select the map option from the visualization pane.



To use a bubble map, drag the map from Visualizations to the Report Canvas. To display values, you have to add any location object to the axis.



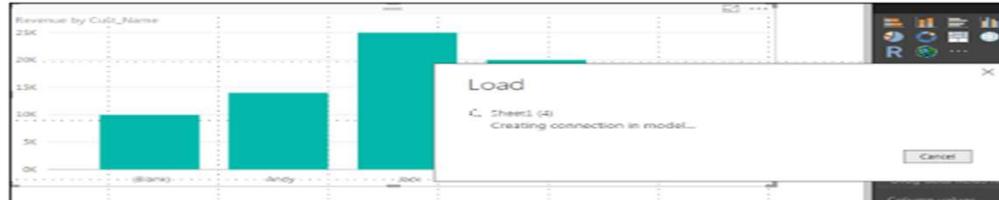
In the value fields, you can see that it accepts values axis such as City and State and or you can also add longitude and latitude values. To change the bubble size, you need to add a field to the value axis.

You can also use a filled map in data visualization, just by dragging the filled map to the Report Canvas.

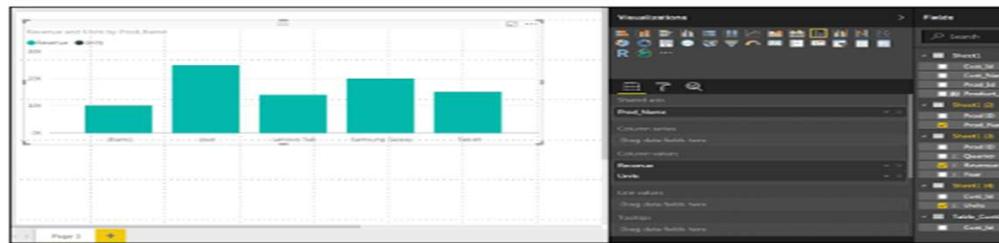
## Using Combination Charts

In data visualization, it is also required to plot multiple measures in a single chart. Power BI supports various combination chart types to plot measure values. Let us say you want to plot revenue and unit\_sold in one chart. Combination charts are the most suitable option for these kind of requirement.

One of the most common Combination chart in Power BI is Line and Stacked column charts. Let us say we have a revenue field and we have added a new data source that contains customer-wise unit quantity and we want to plot this in our visualization.



Once you add a data source, it will be added to the list of fields on the right side. You can add units to the column axis as shown in the following screenshot.



You have other type of combine chart that you can use in Power BI - Line and Clustered Column.

You have other type of combine chart that you can use in Power BI - Line and Clustered Column.



## Using Tables

In Power BI, when you add a dataset to your visualization, it adds a table chart to the Report canvas. You can drag the fields that you want to add to the report. You can also select the checkbox in front of each field to add those to the Report area.

With the numerical values in a table, you can see a sum of values at the bottom.

The screenshot shows a Power BI report canvas with a table visualization. The table has columns: Prod\_Name, Cust\_Name, Revenue, and Units. The 'Units' column has a yellow arrow at the top, indicating it is sorted in descending order. The table data is as follows:

| Prod_Name | Cust_Name | Revenue | Units |
|-----------|-----------|---------|-------|
| Laptop    | Anna      | 10000   | 50    |
| Smart TV  | James     | 25000   | 60    |
| Laptop    | John      | 28000   | 70    |
| Smart TV  | Andy      | 14000   | 20    |
| Smart TV  | Tom       | 20000   | 20    |
| Smart TV  | Jones     | 12000   | 20    |
| Total     |           | 86000   | 250   |

The 'Visualizations' pane on the right shows the selected fields: Prod\_Name, Cust\_Name, Revenue, and Units. The ribbon menu is also visible at the top.

You can also perform a sort in the table using an arrow key at the top of the column. To perform ascending/descending sort, just click the arrow mark, and the values in the column will be sorted.

## Using Tables

In Power BI, when you add a dataset to your visualization, it adds a table chart to the Report canvas. You can drag the fields that you want to add to the report. You can also select the checkbox in front of each field to add those to the Report area.

With the numerical values in a table, you can see a sum of values at the bottom.

The screenshot shows the Power BI Report canvas with a table visualization. The table has four columns: Prod\_Name, Cust\_Name, Revenue, and Units. The data includes rows for Anna, Jack, Jim, and Andy, followed by a summary row for Total (Revenue: 84000, Units: 250). The Revenue and Units columns have yellow boxes around them, indicating they are numerical fields. The table is connected to a data model on the right, which lists Prod\_Name, Cust\_Name, Revenue, and Units as measures. A yellow box highlights the Revenue measure in the data model.

| Prod_Name   | Cust_Name | Revenue | Units |
|-------------|-----------|---------|-------|
| Anna        |           | 20000   | 50    |
| Ipad        | Jack      | 25000   | 20    |
| Samsung Tab | Jim       | 20000   | 20    |
| Tablet      | Jones     | 15000   | 90    |
| Lenovo Tab  | Andy      | 14000   | 10    |
|             |           | 10000   |       |
|             | Anna      | 50      |       |
|             | James     | 60      |       |
| Total       |           | 84000   | 250   |

You can also perform a sort in the table using an arrow key at the top of the column. To perform ascending/descending sort, just click the arrow mark, and the values in the column will be sorted.

The screenshot shows the Power BI Report canvas with a table visualization. The table has four columns: Prod\_Name, Cust\_Name, Revenue, and Units. The data includes rows for Anna, Jack, Jim, and Andy, followed by a summary row for Total (Revenue: 84000, Units: 250). The Revenue column has an arrow icon at the top, indicating it is sorted in descending order. The table is connected to a data model on the right, which lists Prod\_Name, Cust\_Name, Revenue, and Units as measures. A yellow box highlights the Revenue measure in the data model.

| Prod_Name      | Cust_Name | Revenue | Units |
|----------------|-----------|---------|-------|
| Ipad           | Jack      | 25000   | 20    |
| Samsung Galaxy | Jim       | 20000   | 20    |
| Tablet         | Jones     | 15000   | 90    |
| Lenovo Tab     | Andy      | 14000   | 10    |
|                |           | 10000   |       |
|                | Anna      | 50      |       |
|                | James     | 60      |       |
| Total          |           | 84000   | 250   |

The order of the columns in a table is determined by the order in the value bucket on the right side. If you want to change the order, you can delete any column and add the other one.

The order of the columns in a table is determined by the order in the value bucket on the right side. If you want to change the order, you can delete any column and add the other one.

The screenshot shows the Power BI Data view. The 'Values' section on the left lists columns: Prod\_Name, Cust\_Name, Revenue, and Units. The 'Filters' section below it lists visual level filters: Cust\_Name(All), Prod\_Name(All), Revenue(All), and Units(All). On the right, the 'Fields' pane shows the table structure with various columns like Cust\_Id, Cust\_Name, Prod\_Id, Product\_C, Prod\_ID, Prod\_Name, Prod\_ID, Quarter, Revenue, Year, Cust\_Id, Units, Table\_CustC, and Cust\_Id. The 'Prod\_Name' and 'Units' columns in the 'Values' section are highlighted with a yellow oval.

You can also undo summarize or apply different aggregate function on numerical values in the table. To change the aggregation type, click the arrow in the value bucket in front of the measure and you will see a list of formulas that can be used.

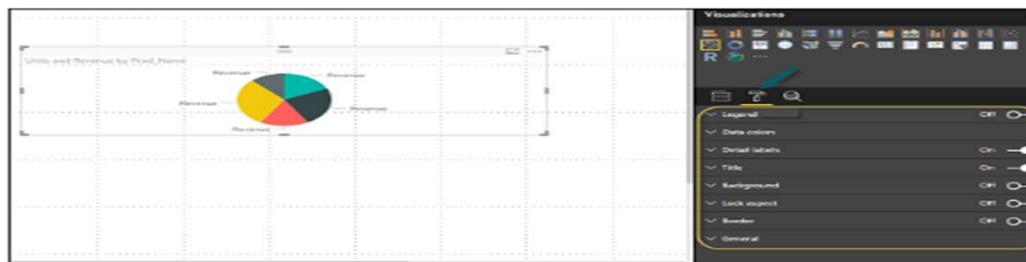
The screenshot shows the Power BI Data view. A context menu is open over the 'Revenue' column in the 'Values' section. The menu options include Remove field, Rename, Conditional formatting, Don't summarize, Sum, Average, Minimum, Maximum, Count (Distinct), Count, Standard deviation, Variance, Median, and Show value as. The 'Sum' option is highlighted with a yellow oval.

## Modify Colors in Charts

In Power BI, you can also modify the colors in the chart. When you select any visualization, it has an option to change the color. Following options are available under the Format tab –

- Legend
- Data Colors
- Detail Label
- Title
- Background
- Lock Aspect
- Border
- General

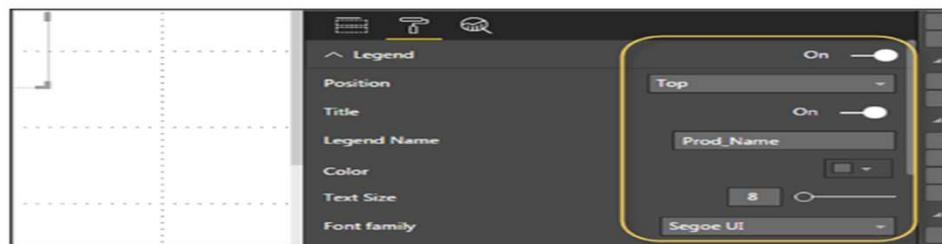
To open these options, go to the Format tab as shown in the following screenshot. Once you click, you can see all the options available.



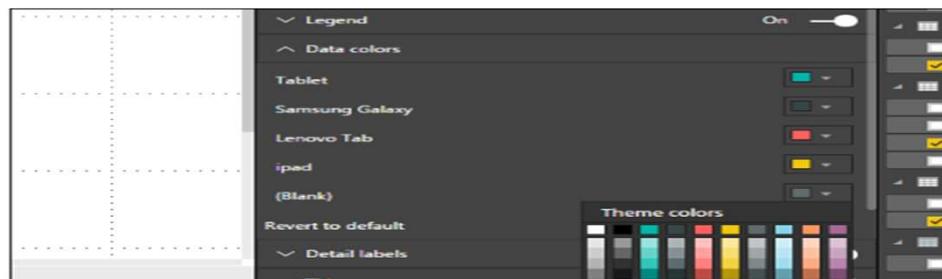
When you expand the Legend field, you have an option where you want to display the legend. You can select –

When you expand the Legend field, you have an option where you want to display the legend. You can select –

- Position
- Title
- Legend Name
- Color
- Text Size
- Font Family

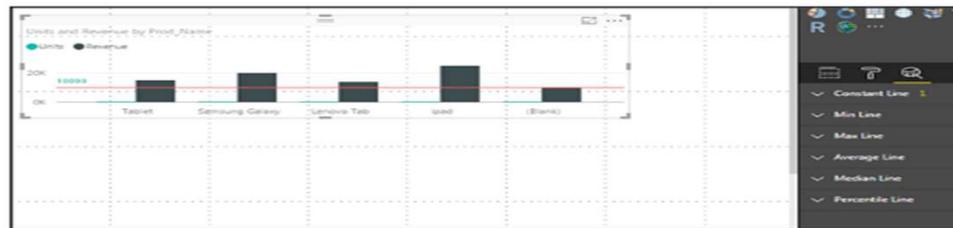


Similarly, you have data colors. In case, you want to change the color of any data field, you can use this option. It shows all objects and their corresponding colors in the chart.



You also have Analytics feature in the tool, where you can draw lines as per requirement in data visualization. You have the following line types in data visualization –

- Constant Line
- Min Line
- Max Line
- Average Line
- Median Line
- Percentile Line



You can opt for a dashed, dotted, or a solid line. You can select Transparency level, color, and position of the line. You can also switch on/off data label for this line.



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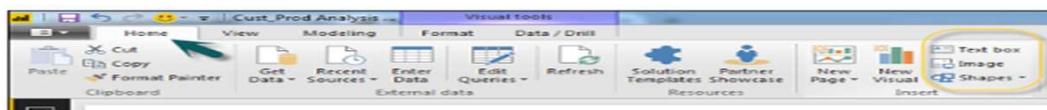


### Adding Shapes, Images and Text box

Sometimes it is required that you need to add static text, images, or shapes to your visualization. In case you want to add header/footer or any static signatures, messages to data visualization this option can be used.

You can also add URLs in the text box and Power BI uses those link to make it live.

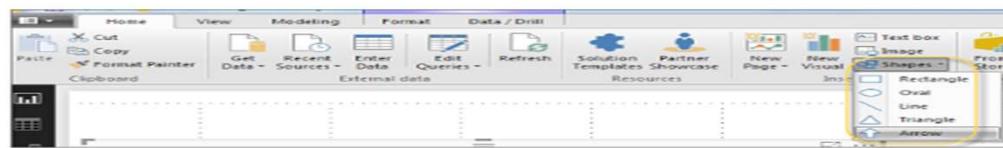
To add shapes, images and text box, navigate to the Home tab and at the top you will find an option to add images.



You can insert different shapes in data visualization. To see the available shapes, click the arrow next to the Shapes button.



You can insert different shapes in data visualization. To see the available shapes, click the arrow next to the Shapes button.



When you click on the text box, it adds a text box in your Report canvas. You can enter any text in the text box and use the rich text editor to make formatting changes.



Similarly, images can be added to data visualization to add logos or other images to data visualization. When you click the Image option, it asks for a path to pass the image file.

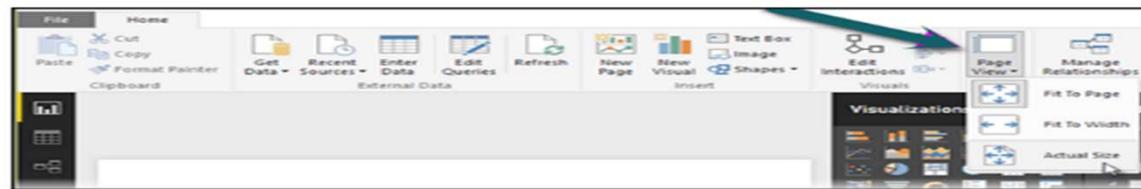
You can add shapes by selecting any shape from the dropdown list. You can also resize it using different options.



## Styling Reports

In Power BI, you have flexible options to adjust the page layout and formatting such as orientation and page size of your report. Navigate to Page View menu from the Home tab and the following options are provided.

- Fit to Page
  - Fit to Width
  - Actual Size



By default, the page size in a report is 16:9; however, it is also possible to change the page size of the report. To change the page size, navigate to the Visualization pane and select Paint brush.

**Note** – To change page size, no visualization should be added to the Report canvas. You have the following options available under Page layout –

- Page Information
  - Page Size
  - Page Background

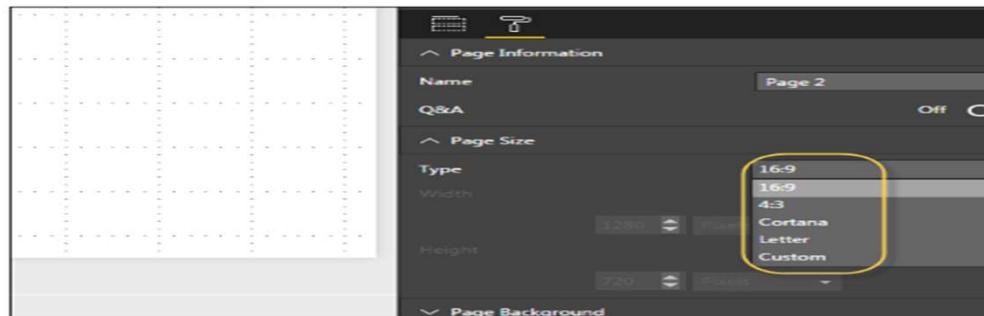
**Under Page Information, you have Name and Q&A.**

- Page Information
- Page Size
- Page Background

Under Page Information, you have Name and Q&A.

Under Page Size, you can select from the following options –

- Type
- Width
- Height



Under Page Background, you can select from the following options:

- Color
- Transparency
- Add Image

In this chapter, you will learn how to share Power BI dashboard for report sharing, printing, publishing, etc.

## Using Power BI Desktop for Report Sharing

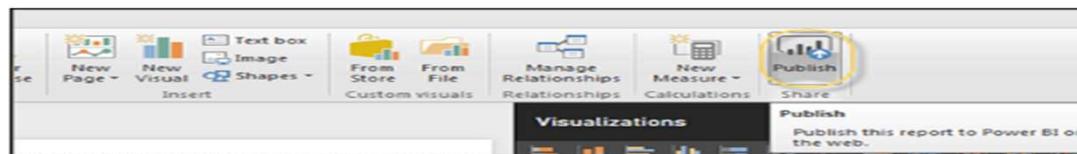
Once BI reports are created in Power BI desktop, you can also share the reports with other business users. All BI reports, dashboards, and data can be shared with other colleagues and business users in the organization.

You can share reports using the following methods –

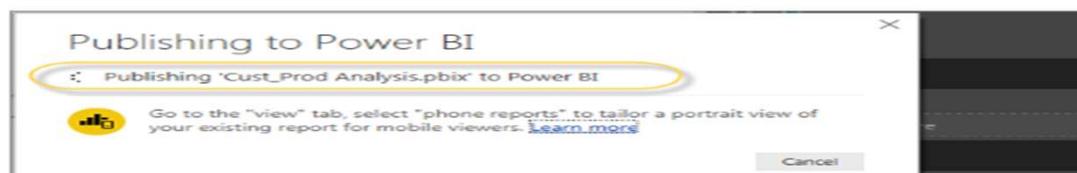
- Publish reports using Power BI Service
- Content Packs combine dashboard, report, and datasets obtained in BI desktop tool
- Create Groups and assign specific rights to different users for report sharing
- Use Power BI mobile apps to access share dashboards and reports

Let us see how to publish a BI report using Power BI desktop tool.

Once the report is created, navigate to the Publish button on the Home tab in Power BI desktop.



Once you select the Publish service, your visuals, custom measures and reports are all packaged and published to Power BI service. Power BI files have an extension .pbix files. When the upload is in process, you get a dialog box that Publishing is in process.



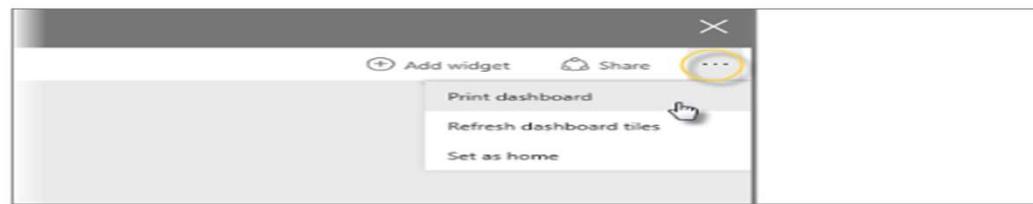


Once the upload is complete, you will get a confirmation message announcing the "Success". You can also view Quick Insights and open the shared report from the dialog box.

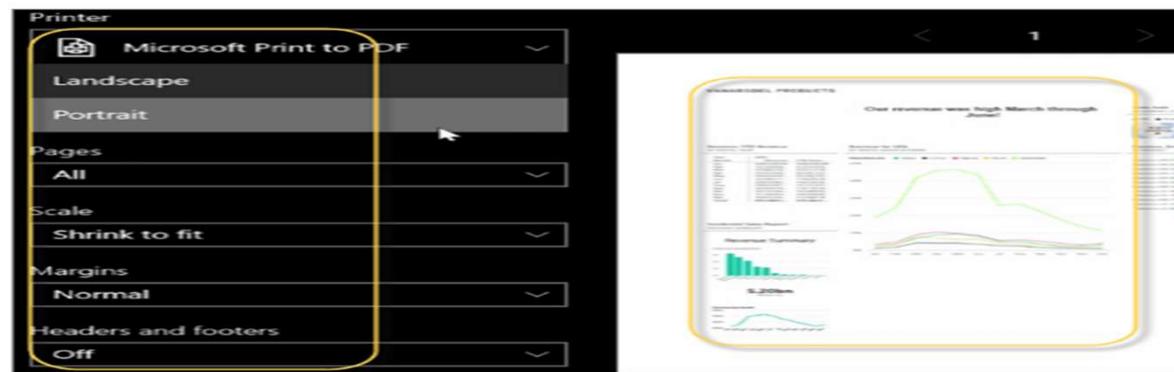


## Printing Power BI Dashboards

It is also required sometimes to take printouts of your reports and dashboards. With Power BI, you can take prints of your BI reports and dashboards. To take a Printout of the report, navigate to Power BI service and click the "..." option.



It will open a Print dialog box. You can select the Printer on which you want to take the printout of the report. You can also select different Print options such as Portrait/Landscape, Margins, Header or Scale.

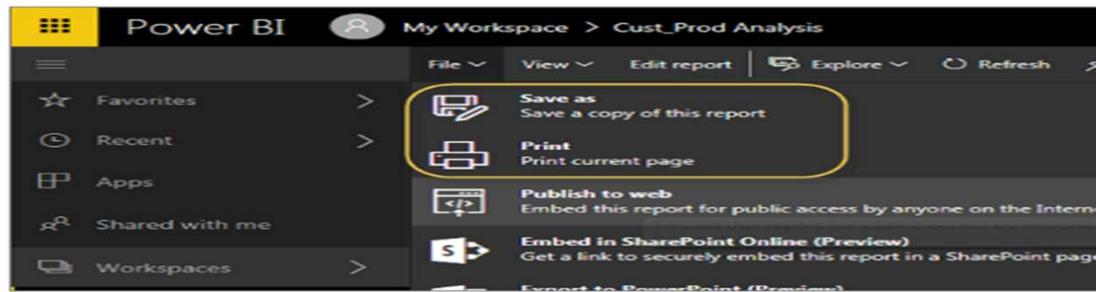


## Export Options

In Power BI, you can also use different Export options to export data from BI report. To use the export option, navigate to Power BI service and select the BI report you want to export.



When you click the Export to option, it generates a CSV file. In Power BI, you can also export/view a report directly by navigating to File — Print option.



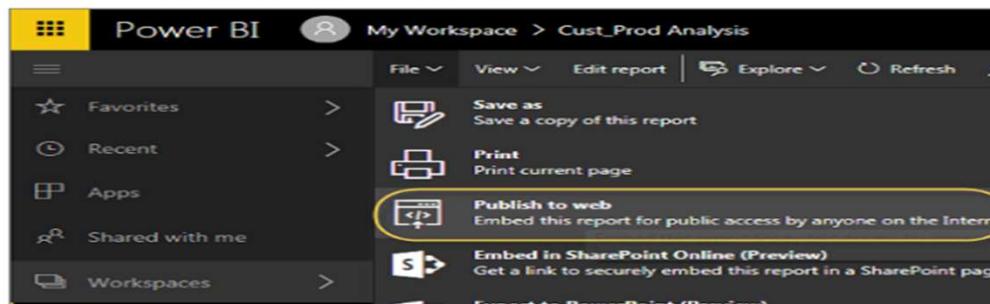
## Publishing Report to Web

In Power BI, it is also possible to publish a BI report to web or share it via email. To publish a report to the web, you have to navigate to Power BI service → My Workspace.



Once you open the report that you want to publish, navigate to the File tab → Publish to Web. Once you select this option, it opens a new dialog that creates an embed code for this report to include in the website or email.

Option says: Get a link or embed code that you can include on a public website. You may use publish to web functionality to share content on a publicly available website. You may not use this functionality to share content internally, which includes through your email, your internal network, or intranet site. Publish a live version that will remain synchronized with the source report in Power BI. Any changes you make to the report will immediately be reflected in the published public version.



When you select - Create Embed code, Power BI prompts that you want to share your data with everyone on the internet.

The following message is displayed: You are about to create an embed code for this report. Once published, anyone on the Internet will be able to access the report and the data it contains, and Microsoft may display the report on a public website or a public gallery.

Before publishing this report, ensure you have the right to share the data and visualizations publicly. Do not publish confidential or proprietary information, or an individual's personal data. If in doubt, check your organization's policies before publishing.

**Note** – You can publish the report as a web page and any user with the link can view it. The link can be sent via email or it can be used as an iframe in a web page.

