Heat Map

The heat map in power bi is a type of data visualization technique, and it is one of the customs made visualization in power bi, in this data visualization is used to show the density of any data on a map, the density is displayed in different colors.

Power BI Heat Map

Heat Map is a custom visualization available with Power BI to show the data numbers through presentation or visual. The heat map will show the highest data density on one specific set of the area through dark heated color and others will have the same heat as the highest value.

In the sports area showing the analysis through a heat map is the latest trend. You take cricket sport they show batsmen favorite hitting zone, you take bowler they show how consistently a bowler placing the ball on one specific zone which is yielding him a wicket, If you take tennis they show in this section of the court a player moving consistently, etc....

Below is the image of the tennis court heat map.



Now we will see how to build a heat map in Power BI visuals.



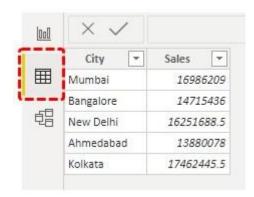
How to Build Heat Map in Power BI?

To build Heat Map we need a certain set of numerical data, below is the sales happened data in different cities of India.

1	Α	В
1	City	Sales
2	Mumbai	16,986,209
3	Bangalore	14,715,436
4	New Delhi	16,251,689
5	Ahmedabad	13,880,078
6	Kolkata	17,462,446
7		

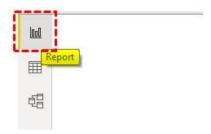
Since this is our first try to build a heat map let's start with simple data set only. Copy and paste the data directly to Power BI or you can copy the data to excel file and then import to Power BI as Excel file reference. You can also download the excel workbook from the below link which is used for this example.

I have directly uploaded the data to Power BI.

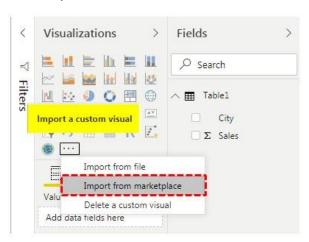


After this, we can build a heat map, but we don't have built-in visualization to use it straight away, follow the below steps to download the custom visualization.

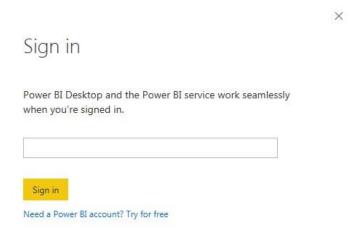
Step 1: Go to Report View.



• **Step 2:** Come to the Visualization panel, click on the "Import a custom visual" (three dots at the bottom), and click on "Import from the marketplace".



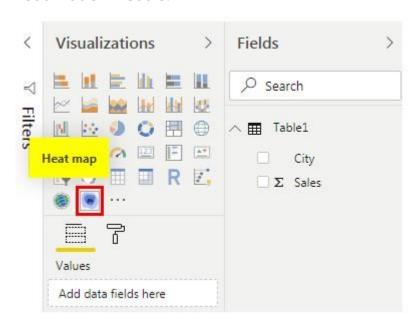
• **Step 3:** This will take us to the web page of custom visuals if already signed into Power BI account or else it will ask you to Sign in.



- **Step 4:** Using your official email id sign and it will take you to the web page.
- **Step 5:** In the search box enter "Heat map" and search, you will see related search results.



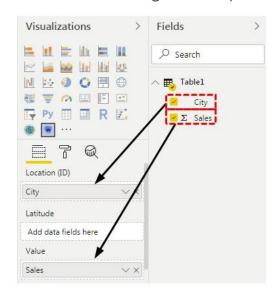
• **Step 6:** Click on "Add" button now we can see this new visual under visualization visuals.



Step 7: Click on this new visual and we will have a blank "heat map" in place.



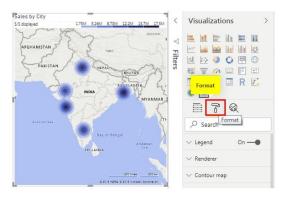
• **Step 8:** By selecting this visual drag and drop "City" column to "Location (ID)" field and drag and drop "Sales" column to "Value" field.



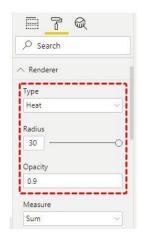
Now we have our "Heat Map" ready to use.



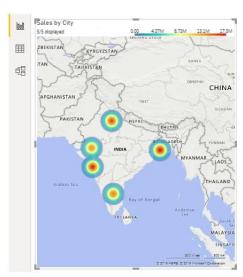
Step 9: Now by selecting the heat map come to the "Format" option.



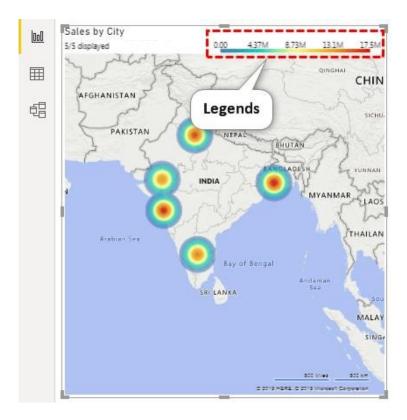
• **Step 10:** Under "Renderer" select the type as "Heat", Radius as "30", Opacity as "0.9", and measure as "Sum".



After all this now finally our heat map looks like this.



One interesting thing about this heat map is at the top of the heat map we can see legend with different colors with different sales numbers for those colors.

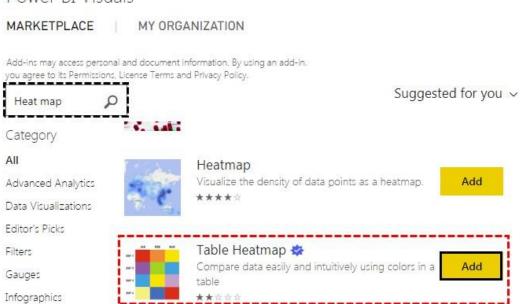


By using these color legends, we can easily read the heat map.

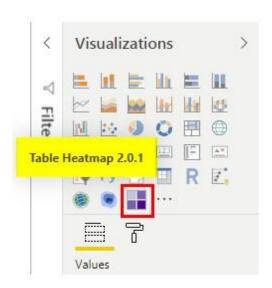


One more new addition to heat map category is building "Table Heat Map". This is also not a built-in tool, so need to download from the web.

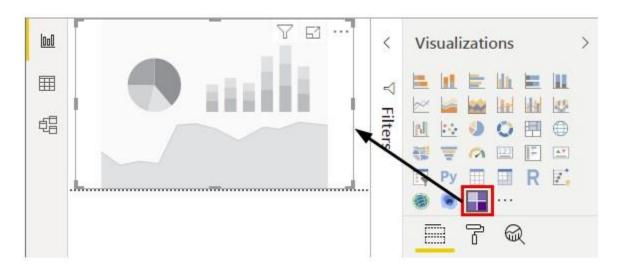
Power BI Visuals



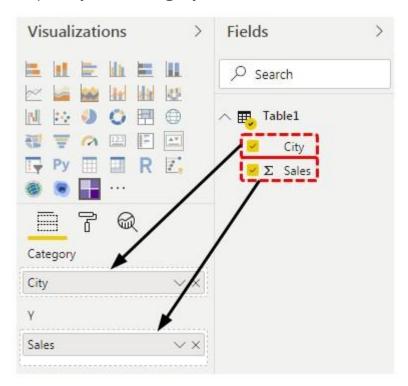
• Click on Add and this will be imported to Power BI visuals category and we can see this under visualization list.



• Insert blank "Table Heat Map".



 Now we need to drag and drop columns to respective fields. Drag and drop "City" to "Category" field and "Sales" to "Y" field.



This will give us the table heat map like the below one.



As you can see each color indicates different numbers slab. I have applied to format to this table, so you can also do the same under the "Formatting" section.

Note: I have done so much of formatting to this table, you can download the Power BI Heat Map file from below link and apply each formatting technique as applied.

Things to Remember Here

- Heat Map is a custom visualization in Power BI, so you need to insert from the market place.
- Power BI Heat Map builds visualization based on numerical values only.
- From the market place, you can download a different kind of heat map visualizations.