

Conditional Formatting

Conditional formatting is type of feature which are used to highlight cells of a data set in different type of colors based of certain or different conditions, this feature is used in both Microsoft Excel and Power BI, there is a catch for conditional formatting in power bi and it is that we can manage it in the value area of the fields.

Conditional Formatting in Power BI

If you think Power BI is just limited to visualization and charts then you will spend a considerable amount of time figuring out how the below colors or in cell bars have been applied. This is not a bar chart or some other visualization rather it is conditional formatting applied to the table visually.

Power BI Conditional Formatting

Month Name	Sale Value	COGS	Discounts	Gross Profit
November	5,947,910.00	4,779,614.00	563,895.80	604,600.20
March	6,124,026.00	4,916,993.00	537,166.13	669,866.87
August	6,325,959.00	5,073,556.00	461,336.58	791,066.42
September	6,845,317.00	5,375,565.00	446,619.76	1,023,132.24
May	6,767,911.00	5,381,571.00	557,899.94	828,640.06
January	7,307,403.50	5,793,733.00		
April	7,429,392.50	6,034,790.50		
February	7,699,201.00	6,148,984.00		
July	8,833,027.50	7,179,054.50		
June	10,268,972.00	8,045,140.00		
December	12,508,268.00	9,973,022.00		
October	13,313,424.00	10,593,834.00		
Total	99,370,811.50	79,295,857.00		

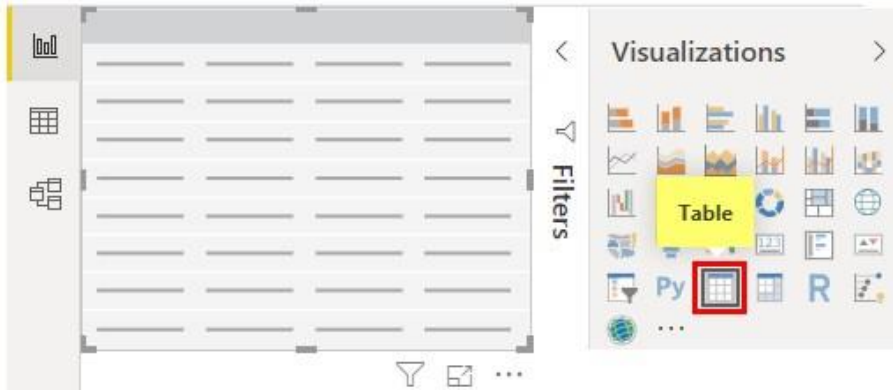
The screenshot shows the Power BI interface with a table of financial data. The 'Sale Value' column is highlighted with a color gradient from red (low) to green (high). The 'Fields' pane on the right shows 'Sale Value' selected, and the 'Conditional formatting' menu is open, highlighting 'Background color'.

To apply Power BI Conditional Formatting, you need data to work with, so you can download the Excel Workbook from the course site which is used for this example.

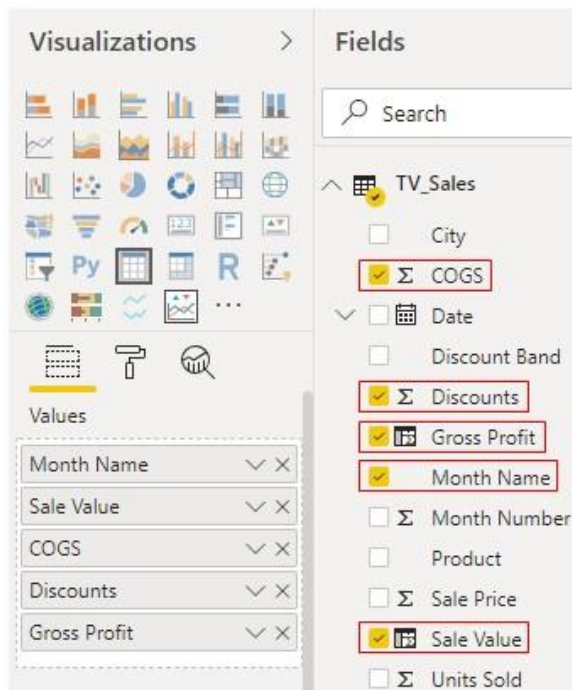


How to Apply Conditional Formatting in Power BI with Examples

- Below is the table I have already created in Power BI report tab.



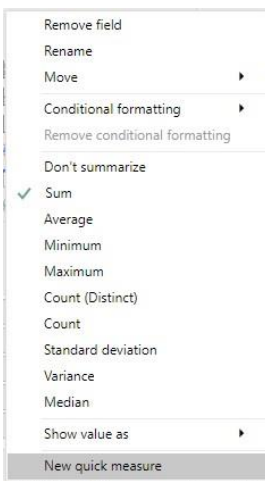
- For the table, I have drag and dropped “Sale Value, COGS, Discounts, and Gross Profit” columns from the table.



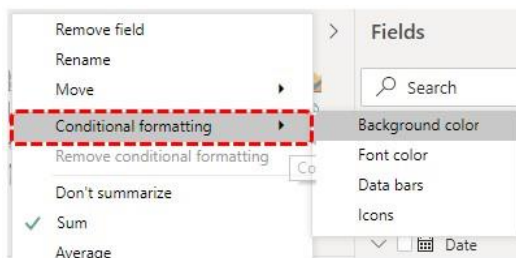
- To apply conditional formatting in Power BI to this table under the field section of the table click on the “drop-down” icon of “Sale Value”.



- When you click on that down arrow you will see below options for this column.



- From the above list just hover on "Conditional Formatting" and it will further show many conditional formatting options in Power BI.

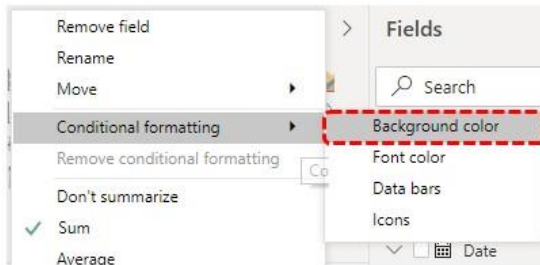


As you can see above, we have four kinds of conditional formatting types, "Background Color, Font Color, Data Bars, and Icons".

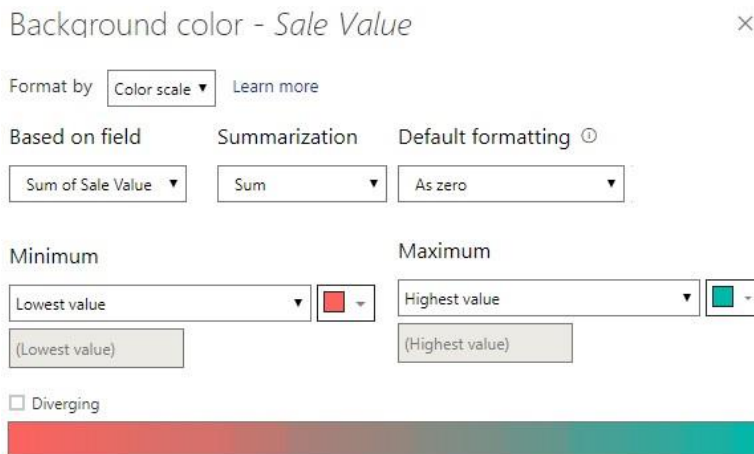
We will see one by one for all the four columns of our table.

Example #1 – Using Background Color

- First, we will apply the background color for the “Sale Value” column. Once again click on the down arrow of “Sale Value” column and choose Conditional Formatting and under this choose “Background Color”.



- This will open up below the formatting window.



- Under “Format By” **drop-down list** we can choose various other types for this category of conditional formatting but as of leaving it as “Color Scale” only.



- Then make sure “Based on Field” is the “Sum of Sale”, “Summarization” as “Sum”, and “Default formatting” as “Zero”.

Background color - *Sale Value*

Format by Color scale ▾ [Learn more](#)

Based on field Sum of Sale Value ▾ Summarization Sum ▾ Default formatting As zero ▾

- Now for “minimum values” it has already chosen “Red” color and for “maximum” value it has chosen light “blue” color.

Minimum Lowest value ▾ Red ▾ (Lowest value)

Maximum Highest value ▾ Light blue ▾ (Highest value)

Diverging

- If you want to have one more color for middle values then check the box “Diverging” to get the middle-value section.

Minimum Lowest value ▾ Red ▾ (Lowest value)

Center Middle value ▾ Yellow ▾ (Middle value)

Maximum Highest value ▾ Light blue ▾ (Highest value)

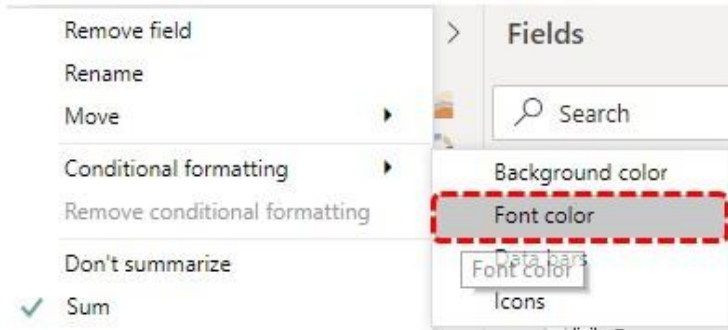
Diverging

- Now click on “Ok” and we will have background color as follows.

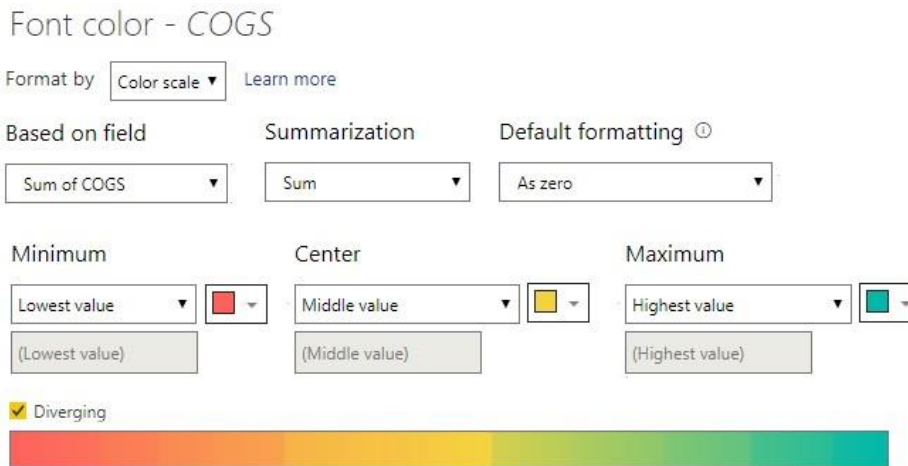
Month Name	Sale Value	COGS	Discounts	Gross Profit
November	5,947,910.00	4,779,614.00	563,695.80	604,600.20
March	6,124,026.00	4,916,993.00	537,166.13	669,866.87
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May	6,767,911.00	5,381,571.00	557,699.94	828,640.06
January	7,307,403.50	5,793,733.00	699,641.82	814,028.68
April	7,429,392.50	6,034,790.50	464,617.43	929,984.57
February	7,699,201.00	6,148,984.00	401,669.61	1,148,547.39
July	8,833,027.50	7,179,054.50	730,107.32	923,865.68
June	10,268,972.00	8,045,140.00	750,078.18	1,473,753.82
December	12,508,268.00	9,973,022.00	509,480.10	2,025,765.90
October	13,313,424.00	10,593,834.00	937,604.08	1,781,985.92
Total	99,370,811.50	79,295,857.00	7,059,716.75	13,015,237.75

Example #2 – Using Font Color

- For “COGS” column we will apply “Font Color” conditional formatting. From conditional formatting choose “Font Color”.



- This will open up below window.



- This is similar to the one we have seen above but this time, as usual, you choose your interesting colors, I have chosen below color.

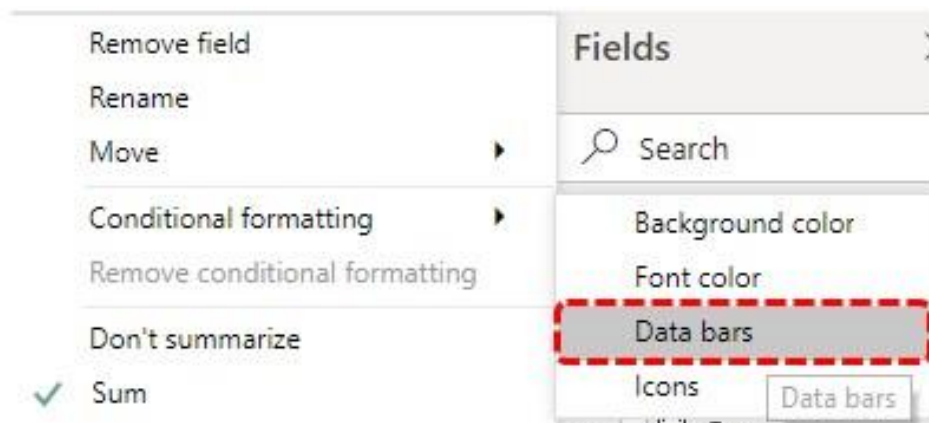


After choosing the colors click on "Ok" and we will have below colors for "COGS" numbers in the table.

Month Name	Sale Value	COGS	Discounts	Gross Profit
November	5,947,910.00	4,779,614.00	563,695.80	604,600.20
March	6,124,026.00	4,916,993.00	537,166.13	669,866.87
August	6,325,959.00	5,073,556.00	461,336.58	791,066.42
September	6,845,317.00	5,375,565.00	446,619.76	1,023,132.24
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Total	99,370,811.50	79,295,857.00	7,059,716.75	13,015,237.75

Example #3 – Using Data Bars

- Data bars look like an "in-cell" chart based on the value of the cell value. For the "Discounts" column we will apply "data bars".
- Click on the down arrow of "Data Bars" and choose "Conditional Formatting". Under this category of "Conditional Formatting" choose "Data Bars".



This will open up below the "Data Bars" conditional formatting window.

Data bars

Format cells with bars based on their values.

Base value

Discounts

Show bar only

Minimum

Lowest value

(Lowest value)

Maximum

Highest value

(Highest value)

Positive bar

Bar direction

Left to right

Negative bar

Axis

- In this category, we can choose whether we want to show only "Bars" or we want to show bars along with numbers.

Data bars

Format cells with bars based on their values.

Base value

Discounts

Show bar only

If you check this box we will see only bars and no values will be displayed

- Since we need to see numbers along with bars, let's not check this box. Next, we can choose colors for "Minimum" & "Maximum" values.

Minimum

Lowest value

(Lowest value)

Maximum

Highest value

(Highest value)

Positive bar

Bar direction

Left to right

Negative bar

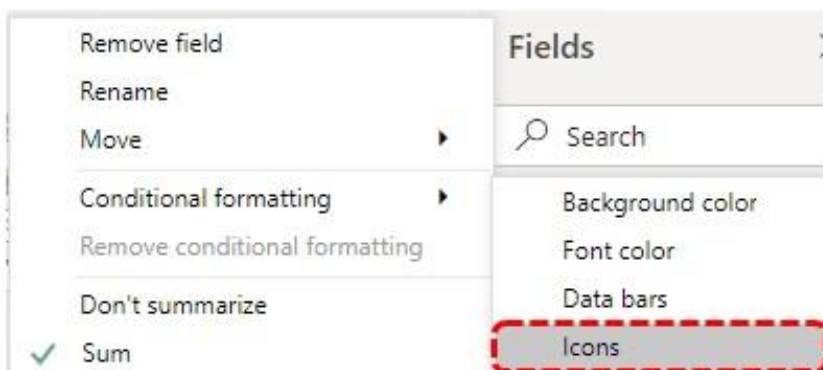
Axis

Choose the colors as you would like to and click on Ok we will have below in cell charts or bars for "Discount" column.

Month Name	Sale Value	COGS	Discounts	Gross Profit
November	5,947,910.00	4,779,614.00	563,695.80	604,600.20
March	6,124,026.00	4,916,993.00	537,166.13	669,866.87
August	6,325,959.00	5,073,556.00	461,336.58	791,066.42
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Example #4 – Using Icon Sets

- One final category under conditional formatting is "Icon Sets". These are icons to show against numbers based on the rules specified,
- Click on the down arrow of "Profit" and choose conditional formatting.



This will open up below "Icons" window, under this we will define what kind of "Icons" to show under different conditions.

Icons - Gross Profit

Format by Rules [Learn more](#)

Based on field: Sum of Gross Profit

Summarization: Sum

Icon layout: Left of data

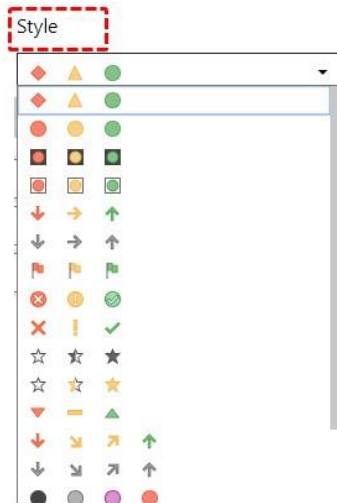
Icon alignment: Top

Style: ◆ ▲ ●

Rules ↕ Reverse icon order

If value	is greater than or equal to	0	Percent	and	is less than	33	Percent	then	◆
If value	is greater than or equal to	33	Percent	and	is less than	67	Percent	then	▲
If value	is greater than or equal to	67	Percent	and	is less than or equal to	100	Percent	then	●

- Under "Style" category we can choose a variety of icons to show.



- Choose the best fit for your data sets.
- Under the rules section, we can number ranges or percentage ranges.

Rules ↕ Reverse icon order + New rule

If value	is greater than or equal to	0	Percent	and	is less than	33	Percent	then	◆	↑ ↓ ×
If value	is greater than or equal to	33	Percent	and	is less than	67	Percent	then	▲	↑ ↓ ×
If value	is greater than or equal to	67	Percent	and	is less than or equal to	100	Percent	then	●	↑ ↓ ×

- You can set up as you need and we will have below icons for "Profit" column.

Month Name	Sale Value	COGS	Discounts	Gross Profit
November	5,947,910.00	4,779,614.00	563,695.80	604,600.20
March	6,124,026.00	4,916,993.00	537,166.13	669,866.87
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Total	99,370,811.50	79,295,857.00	7,059,716.75	13,015,237.75

Note: To apply conditional formatting we need data, you can download the Power BI file to get the ready table.



Things to Remember

- Conditional formatting is similar to the one in MS Excel.
- We have four different kinds of conditional formatting options in Power BI.
- We can define rules to apply conditional formatting in Power BI.