



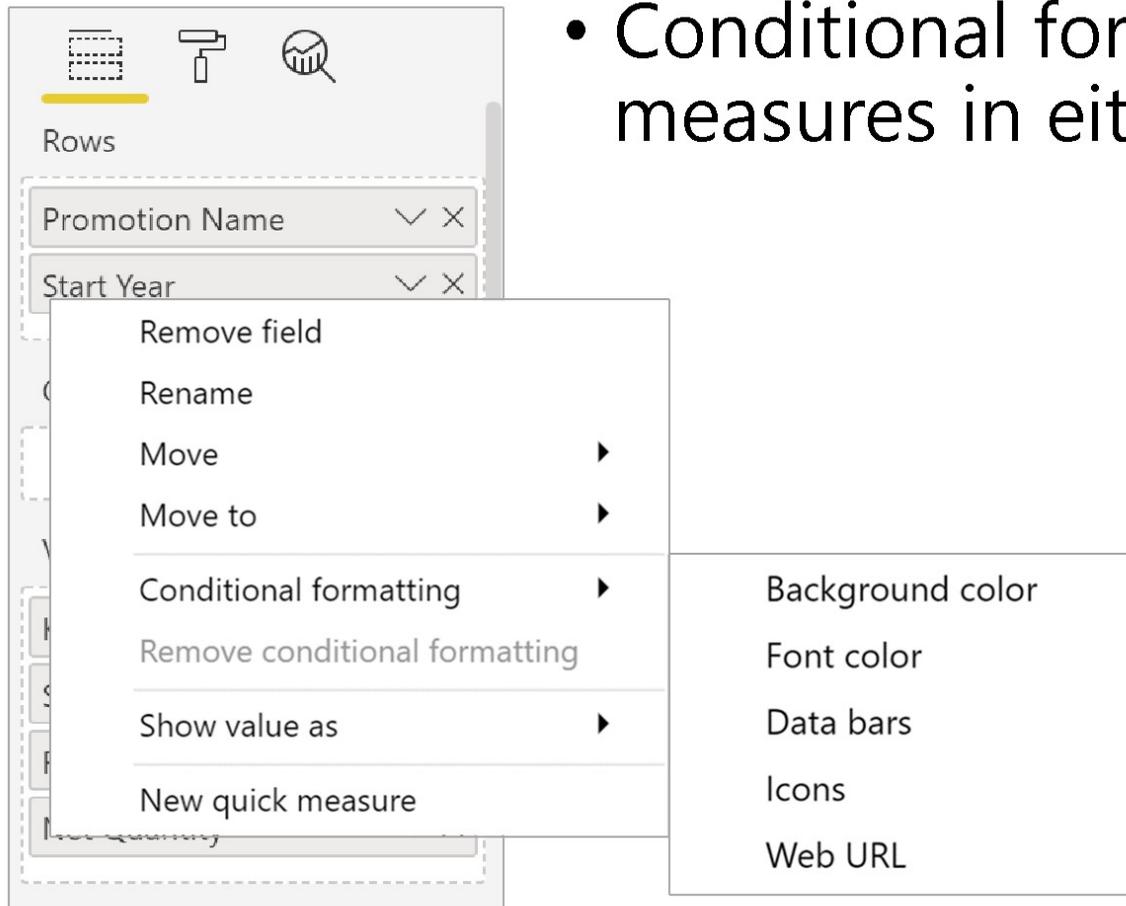
Designing Advanced Reports

- Conditional Formatting
- Drillthrough Filters
- Visual Interactions
- Sync Slicers
- Report Tooltips
- Bookmarks
- Custom Visuals
- Recommended Practices

Designing Advanced Reports

Conditional Formatting

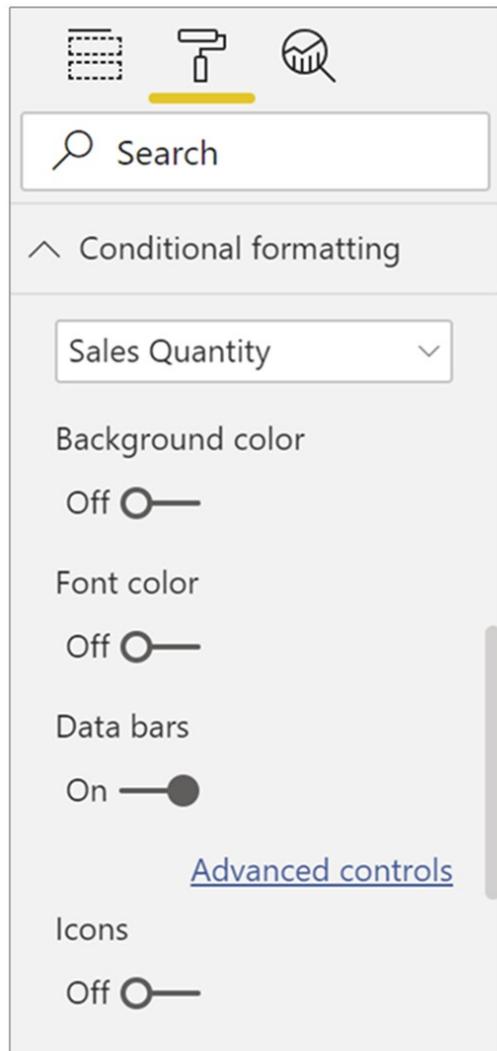
- Conditional formatting can be applied to calculated measures in either the *table* or *matrix* visuals



Page Title & Geo	Page Views	Unique Views	Searches	Bounce Rate
Havens Consulting	4,326	3,587	546	47.6%
Files & Templates — Hav...	4,270	3,424	225	72.8%
Blog / Media — Havens ...	3,464	2,921	35	73.2%
Blog Posts — Havens Co...	2,695	2,050	33	63.6%
Power BI Vs. Excel — Hav...	2,367	2,202	1,540	91.2%
Havens Consulting — Se...	1,403	1,034	0	37.9%
About Us — Havens Con...	1,226	1,049	455	47.1%
What Is Power BI? — Hav...	855	723	241	57.5%
Creating a Slicer Pop-Out...	800	679	9	80.1%
Google Analytics Report	786	710	20	80.8%
Total	29,936	24,836	4,512	70.0%

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Conditional Formatting



- Conditional formatting can be applied to calculated measures in either the *table* or *matrix* visuals
- Settings can be accessed:
 - In the **Fields** well of the **Visualizations** pane¹
 - From the sub-menu under the Formatting pane

Designing Advanced Reports

Conditional Formatting ► Background and Font Colors

- **Background** and **font color** share the same *format by* settings
- Formatting logic can be based on:
 - **Color scale**
 - Applies a gradient between *min* and *max*
 - Min/Max can be set to *lowest value* or *fixed absolute value*
 - *Diverging* enables a third middle color

Background color - Sales

Format by: Color scale (dropdown)

Apply to: Values only (dropdown)

Based on field: Sales (dropdown)

Default formatting: As zero (dropdown)

Minimum: Lowest value (dropdown) [Red swatch]

Maximum: Highest value (dropdown) [Green swatch]

Enter a value (input field)

Diverging

Learn more (link)

OK (button) Cancel (button)

Designing Advanced Reports

Conditional Formatting ► Background and Font Colors

- **Background** and **font color** share the same *format by* settings
- Formatting logic can be based on:
 - **Rules**
 - Applies colors based on one or more value ranges, each with a set color
 - Each value range starts with:
 - An **If** value condition
 - An **and** value condition
 - And a **color**

Font color - Sales

Format by: Rules Apply to: Values only

Based on field: Sales

Rules

Condition	Color
If value is greater than or equal to 0 Percent and is less than 33 Percent	Red
If value is greater than or equal to 33 Percent and is less than 66 Percent	Yellow
If value is greater than or equal to 66 Percent and is less than 100 Percent	Green

Learn more OK Cancel

Designing Advanced Reports

Conditional Formatting ► Background and Font Colors

- **Background** and **font color** share the same *format by* settings
- Formatting logic can be based on:
 - **Field value**
 - Applies colors by using a *calculated measure* or a *column* that specifies a color – either using a *text value* or a *hex code*
 - Custom logic can be created inside a calculated measure to apply the desired color

Font color - Sales

Format by: Field value

Apply to: Values only

Based on field: Top Selling Product

[Learn more](#) OK Cancel

Field value formatting will be outside the scope of this training

Designing Advanced Reports

Conditional Formatting ► Data Bars

- **Data bars** can be set to *lowest value* or *fixed absolute value*
- **Other data Bar properties:**
 - Positive/negative bar (*color*)
 - Axis (*color*)
 - Bar direction
 - Show bar only – *hides the value*

Data bars

Format cells with bars based on their values.

Base value

Sales Quantity

Show bar only

Minimum: Lowest value (Lowest value)

Maximum: Highest value (Highest value)

Positive bar: [Teal color]

Negative bar: [Red color]

Bar direction: Left to right

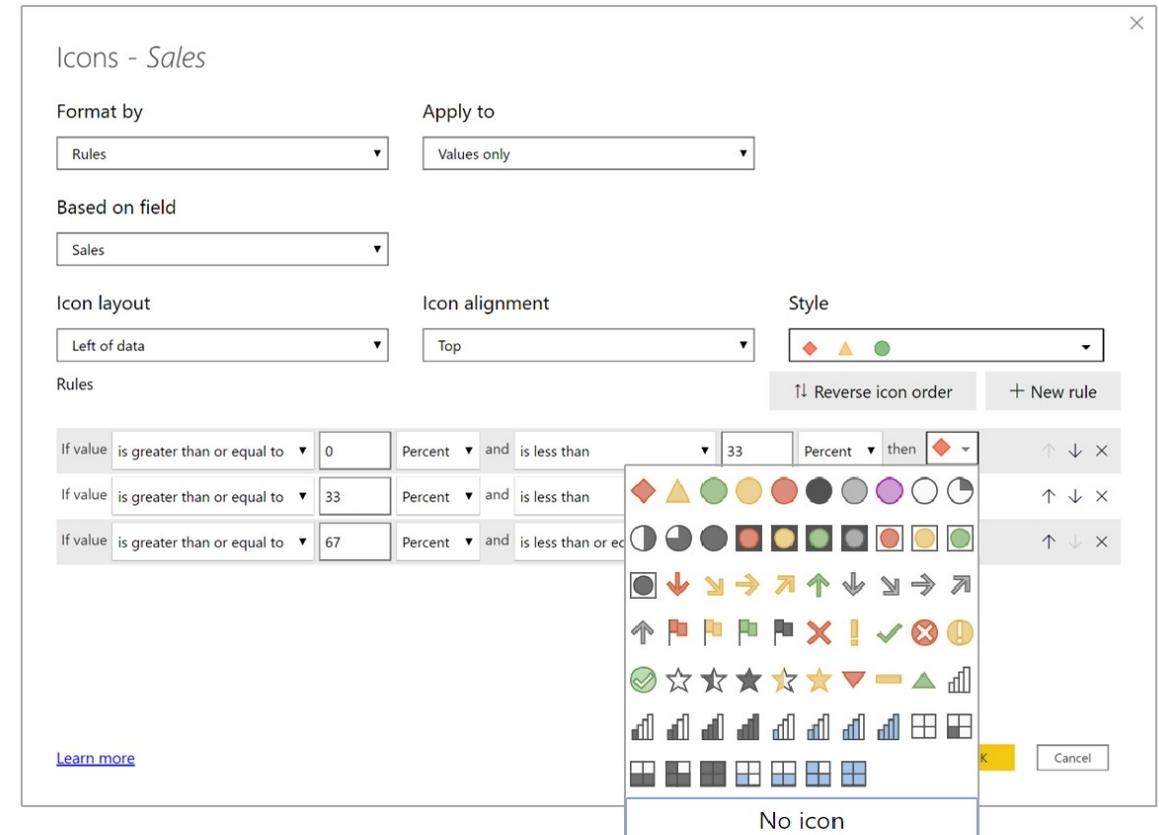
Axis: [Black color]

OK Cancel

Designing Advanced Reports

Conditional Formatting ► Icons

- **Icon sets** in Power BI are *very similar* to the ones found in *Excel*
- Formatting logic can be based on **Rules** or **Field Value**
- By default, icon rules will apply:
 - Red diamond to the *lower 33%*
 - Yellow triangle to the *middle 33%*
 - Green circle to the *upper 33%*
- *Custom* icon sets can be imported in Power BI Desktop



Designing Advanced Reports

Conditional Formatting ► Web URL

- **Web URLs** can be applied to fields as **active links** if there is a *column* or *measure* that contains a website URL
- Formatting logic is based on **Field value**
- When this formatting is applied to a field – *each row* is an active link to a website

Web URL - Sales

Format by: Field value

Apply to: Values only

Based on field: Selected Page

Sales Details

Country	Sales	YoY Sales	YoY Sales %	Top Selling Product
United States	\$21,814,465	\$5,470,851	33%	A. Datum Slim Di...
Regular	\$11,932,740	\$2,911,538	↓ 32%	NT Wireless Transm...
Deluxe	\$7,598,807	\$1,981,601	↓ 35%	A. Datum Super-zo...
Economy	\$2,282,918	\$577,712	↓ 34%	A. Datum Slim Digit...
Canada	\$5,313,337	\$1,196,486	29%	Contoso Wireless ...
Regular	\$2,985,745	\$700,125	↓ 31%	A. Datum Bridge Di...
Deluxe	\$1,710,997	\$358,646	↓ 27%	Contoso Wireless N...

Designing Advanced Reports

Conditional Formatting ► Subtotals and Totals

- Conditional formatting can also be applied to the *subtotals* and *totals* in *matrix tables*
- **Thresholds** and **ranges** must be set manually when applied¹

Font color - Sales

Format by: Rules

Apply to: Values and totals

Based on field: Sales

Rules

1! Reverse color order + New rule

If value is greater than or equal to 0 and is less than 500 then Number (Red)

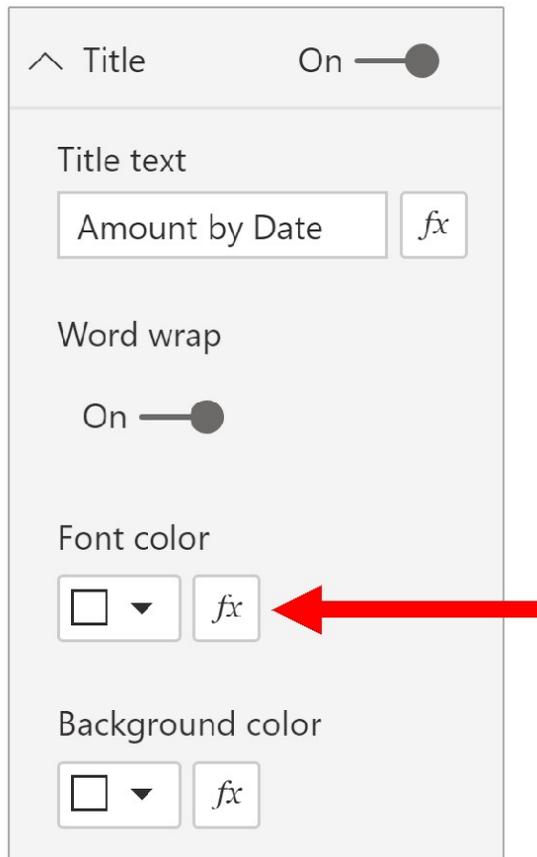
If value is greater than or equal to 500 and is less than 5000 then Number (Yellow)

Country	Sales	YoY Sales	YoY Sales %	Top Selling Product
United States	\$21,814,465	\$5,470,851	→ 33%	A. Datum Slim Di...
Regular	\$11,932,740	\$2,911,538	↓ 32%	NT Wireless Transm...
Deluxe	\$7,598,807	\$1,981,601	→ 35%	A. Datum Super-zo...
Economy	\$2,282,918	\$577,712	→ 34%	A. Datum Slim Digit...
Canada	\$5,313,337	\$1,196,486	↓ 29%	Contoso Wireless ...
Regular	\$2,985,745	\$700,125	↓ 31%	A. Datum Bridge Di...
Deluxe	\$1,710,997	\$358,646	↓ 27%	Contoso Wireless N...

1: Only numbers can be applied – not percentages

Designing Advanced Reports

Conditional Formatting ► Other Applications



- **Measure Based Formatting** can also be applied to other visual and object **attributes**
 - Attributes where this formatting can be applied are *indicated* with an *fx* button next to it
- Two *primary types* of formatting are available:
 - **Color** – Logic is based on: *Color scale, Rules, or Field value*
 - **Text** – Logic is based on: *Field value*¹

1: Creates a dynamic text string that can be changed during refresh or filter selection