Create key performance indicator (KPI) visualizations

A Key Performance Indicator (KPI) is a visual cue that communicates the amount of progress made toward a measurable goal

When to use a KPI

KPIs are a great choice:

- To measure progress. Answers the question, "What am I ahead or behind on?"
- To measure the distance to a goal. Answers the question, "How far ahead or behind am I?"

KPI requirements

A designer bases a KPI visual on a specific measure. The intention of the KPI is to help you evaluate the current value and status of a metric against a defined target. A KPI visual requires a *base* measure that evaluates to a value, a *target* measure or value, and a *threshold* or *goal*.

A KPI dataset needs to contain goal values for a KPI. If your dataset doesn't contain goal values, you can create them by adding an Excel sheet with goals to your data model or PBIX file.

- Power BI Desktop
- Power BI service

To follow along, use the Retail Analysis sample PBIX file.

1. From the upper left section of the menubar, select **File** > **Open report**.
2. Find your copy of the **Retail Analysis Sample PBIX file**.
3. Open the **Retail Analysis Sample PBIX file** in report view  .
4. Select  to add a new page.

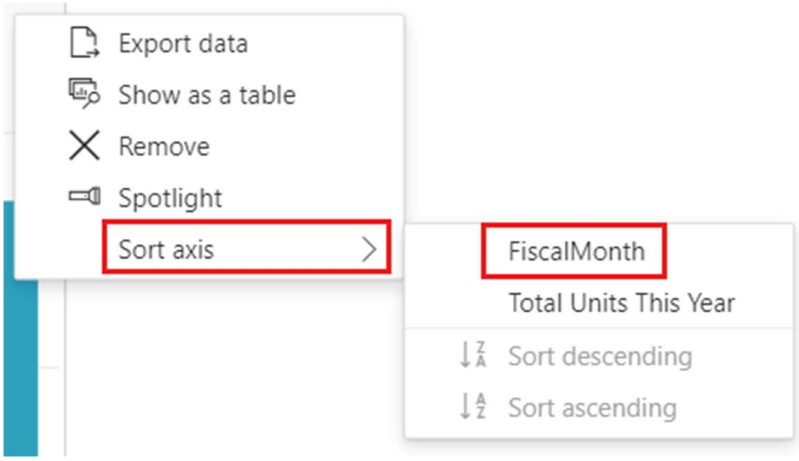
Note
Sharing your report with a Power BI colleague requires that you both have individual Power BI Pro licenses or that the report is saved in Premium capacity.

How to create a KPI

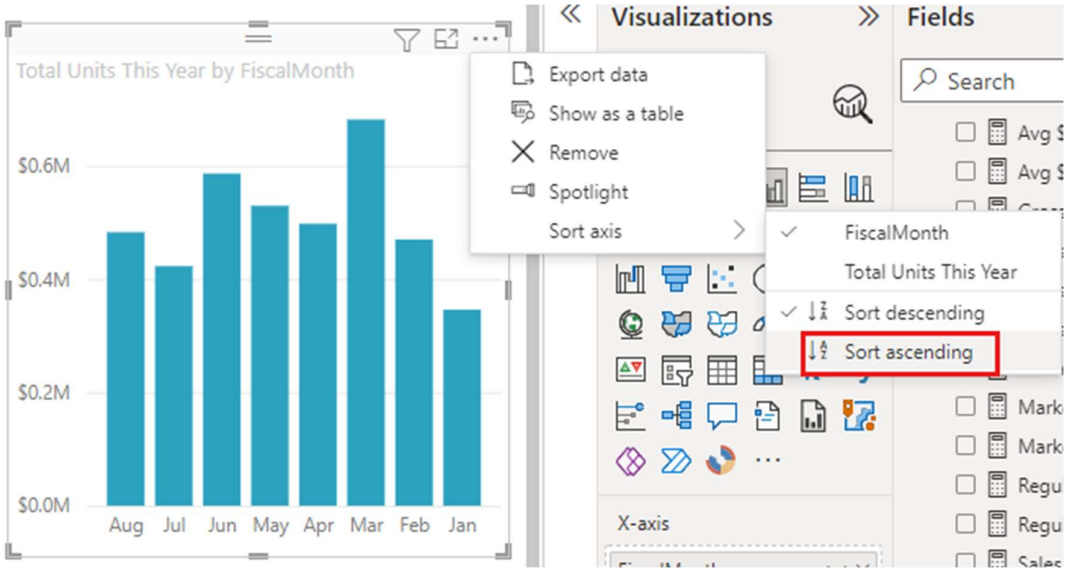
In this example, you'll create a KPI that measures the progress you've made toward a sales goal.

1. From the **Fields** pane, select **Sales** > **Total Units This Year**. This value will be the indicator.
2. Add **Time** > **FiscalMonth**. This value will represent the trend.

3. In the upper-right corner of the visual, select the **More options** ellipsis (...) and select **Sort axis** > **FiscalMonth**.



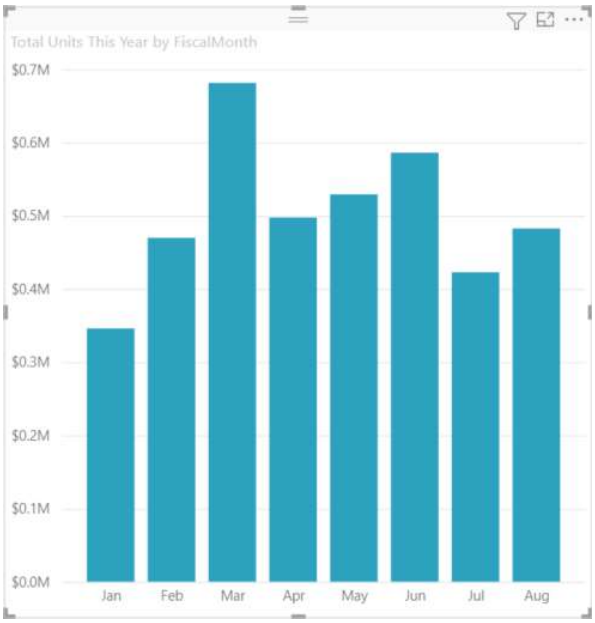
4. Select the ellipsis again and choose **Sort axis** > **Sort ascending**.



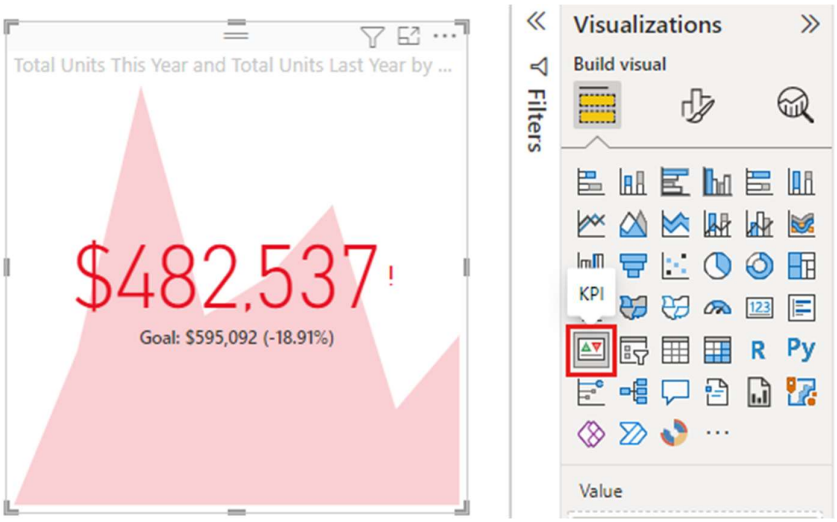
5. Check that Power BI has sorted the columns in ascending order by **FiscalMonth**.

   Important
   Once you convert the visualization to a KPI, there's **no** option to sort. You must sort the visualization now, if desired.

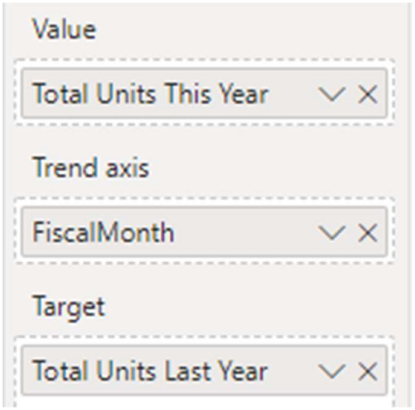
   Once sorted correctly, your visual will look like this:



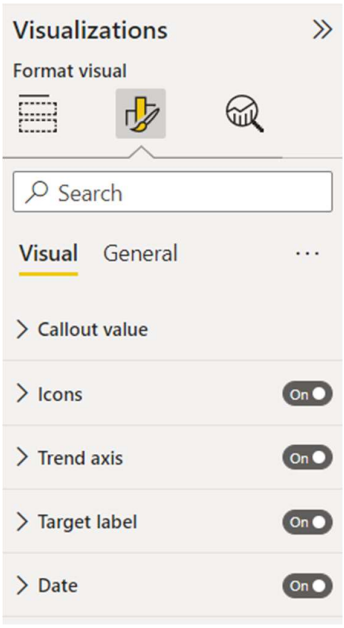
6. Convert the visual to a KPI by selecting the **KPI** icon from the **Visualization** pane.



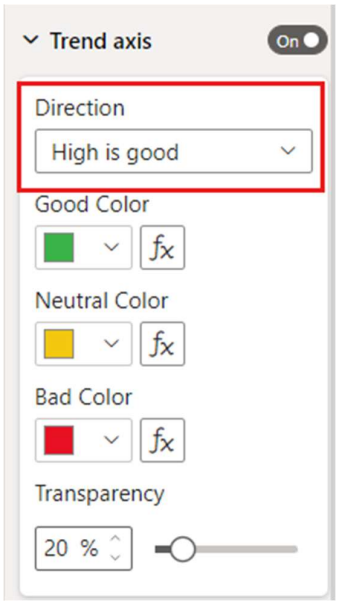
7. To add a goal, drag **Total Units Last Year** to the **Target** field.



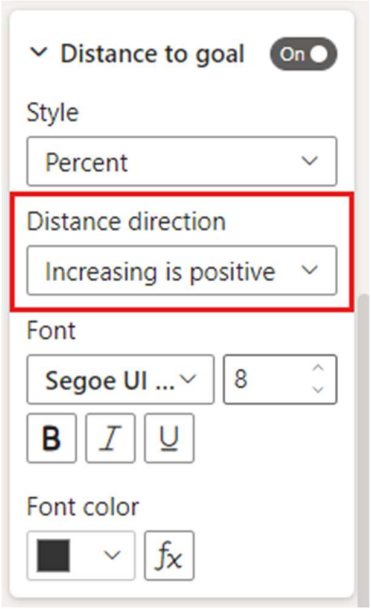
8. Optionally, format the KPI by selecting the paint brush icon to open the **Format visual** pane.



- **Callout value** - controls the indicator's display units, decimal places, and text formatting.
- **Icons** - when set to **On**, the visual shows small icons next to the value, a green checkmark for an increasing value, and a red exclamation point for a decreasing value. The value's direction is set by **Trend axis**.
- **Trend axis** - when set to **On**, the visual shows the trend axis as the background of the KPI visual. People consider some KPIs better for *higher* values and consider some better for *lower* values. For example, earnings versus wait time. Typically a higher value of earnings is better versus a higher value of wait time. For this report, select **Direction** > **High is good**. Optionally, change the color settings.



- **Target label** - when set to **On**, the visual shows the value's label. **Distance to goal** sets the style and direction of the distance from the goal.



- **Date** - when set to **On**, the visual shows the date. Optionally, change the font, and its style and color.

KPIs are also available on your mobile devices. It gives you the option to be always connected to your business's heartbeat.

Considerations and troubleshooting

If your KPI doesn't look like the one above, it may be because you didn't sort by **FiscalMonth**. KPIs don't have a sort option. You'll need to start again and sort by **FiscalMonth** *before* you convert your visualization to a KPI.