KPI Charts

You can create visualizations of your data's Key Performance Indicators (KPIs). Use this feature to track the changes in important KPIs in your data. When you configure the KPI chart to suit your business use case, you can save it as an Chart, add it to a Dashboard to increase visibility, or create alerts to receive notifications on the changes in the KPI using the Alerts feature.

When you search a single measure, such as Sales, Alchemer Dashboard automatically creates a KPI chart displaying the topmost value of that column. If you search multiple terms, you can configure the column visualized in your KPI chart. To tailor the KPI visualization to your business use case, you can add time comparison keywords such as "weekly" or "monthly" to change the aggregation of your KPI, use the chart configuration menu to decide how much information to display, or apply conditional formatting.

KPI charts for attributes

You can visualize an attribute (string, date, boolean value) as a KPI chart. This feature allows you to create KPIs for values such as "Date" or "Product".

To create an attribute KPI, follow these steps:

1. Search for the attribute in the Search bar.

2. A table displaying all values of the attribute appears. To view the KPI chart, choose one option:

- Select the **table to chart** toggle above your **Charts** and select the **chart** icon.
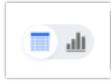
 table to chart

- Select the **Change visualization** icon to the right of your Charts and choose the KPI chart option.

 Change visualization icon

3. If your search contains multiple columns, select the **chart configuration** icon to the right of your Chart. Drag and drop the attribute column into the **visualized** section to visualize it in the KPI chart.

 chart configuration icon

Please note that if your query returns more than one row of results, the KPI chart displays the topmost value from the result table.

Configure visualized columns

If you search multiple measures or attributes, the KPI chart automatically displays only the first search term. To create a KPI chart based on another measure or attribute from your search, select the **chart configuration** icon and drag and drop the currently visualized column to the **Not visualized** section. Select the new measure or attribute from the **Not visualized** section and drag and drop it into the **Visualized** section.

 chart configuration icon

If you include time column (columns of type Date, Datetime, Timestamp and Time) or time period keyword (Hourly, Daily, Weekly, etc.) in your search, the keyword appears in the **Time axis** section.

Time-series aggregation in KPIs

If you search a measure or attribute with a keyword comparing across time periods, such as `Sales weekly` , your KPI visualization displays data corresponding to the most recent date bucket associated with your search. For a measure KPI, the percent increase or decrease in that data from the previous data point appears.

In the following example, the total sales for the week of 02/21/2022 was 3.21M. This measure increased 0.2% compared to the total sales for the previous week, 3.2M. Here, "WoW" signifies that the percent change is calculated week-over-week. You can also search a measure by day (DoD), month (MoM), quarter (QoQ), or year (YoY).


To create a KPI chart that displays the change between two specific date buckets, define the time periods for comparison in the search bar. For example, to compare the change in sales between this quarter and the previous quarter, search for `sales quarterly this quarter last quarter` .

> You can only create KPI charts with data arranged in ascending, or chronological, order. You cannot create a KPI chart from any search using "date descending" as a filter

For more information on using time period keywords in search, see time series analysis.

Sparkline visualization for time-series KPIs

When you search for a measure with a time-series keyword, for example `Sales monthly` , your KPI chart automatically displays a sparkline visualization of all the data points defined in your query. For ease of comparison, the two most recent data points are highlighted in the sparkline visualization. When the date bucket defined by your query is in progress (for example, a `sales weekly` KPI you consult on a Wednesday), your sparkline visualization shows a dotted line between the last data point and the accumulated value by the latest date.
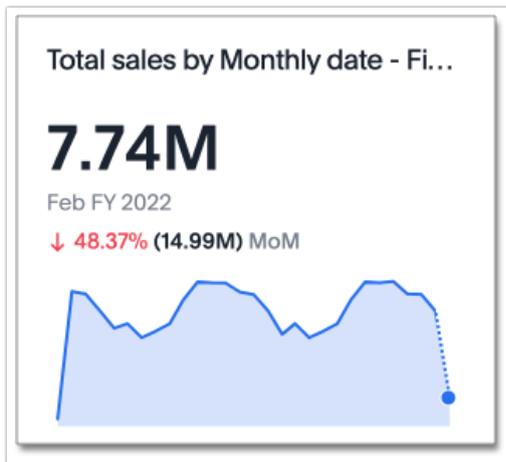
To see the exact value of the metric and corresponding date for each data point, hover over the sparkline visualization.
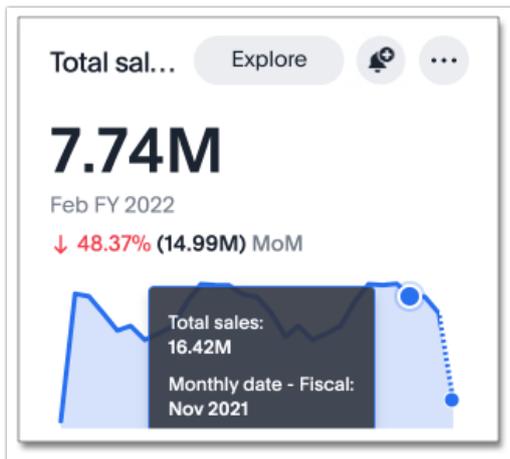
Configure KPI display options

When you create a KPI chart with a time period keyword, you can change the display options before saving as a Chart or pinning to a Dashboard.

Click the **chart configuration** icon and select **Settings** to make the following display changes:

- **Show Date Label** to display or hide the date label.
- **Show Sparkline** to display or hide the time-series visualization.
- **Show Comparison** to display or hide the percentage change since the last period selected.
- **Compare with** to display a percent change comparison from the most recent data point to the comparison point you choose.
- **Positive change color** to change the color of the percentage increase label.
- **Negative change color** to change the color of the percentage decrease label.
- **Max data points** to define the maximum number of data points to appear in the visualization.

Comparison points

You can now set your KPI chart to display a percent change comparison between the most recent data point and a selected comparison point.

Comparison points depend on the time-based keywords you use in your search, such as 'monthly' or 'weekly'. When you search using one of the following time buckets, you can choose to compare the most recent data point with the corresponding options:

Hourly
Previous available data point, previous hour

Daily
Previous available data point, previous day, previous week (same day), previous month (same day), previous quarter (same day), previous year (same day)

Weekly
Previous available data point, previous week, previous month (same week), previous quarter (same week), previous year (same week)

Monthly
Previous available data point, previous month, previous quarter (same month), previous year (same month)

Quarterly
Previous available data point, previous quarter, previous year (same quarter)

Yearly
Previous available data point, previous year

Note that the default comparison point is "previous available data point", which compares your most recent data point to the last recorded data point. In cases where there is missing data between the most recent data point and your chosen comparison point, use "previous available data point" to see the percent change from the last recorded data point.

To set your KPI's comparison point, follow these steps:

1. Navigate to Search data and create a time-series KPI, by searching for a measure and a date keyword, such as sales weekly , and selecting the KPI chart type.

2. Open the **Edit chart configuration** menu and select **Settings**.

3. Under **Compare with**, select the desired comparison point from the dropdown.
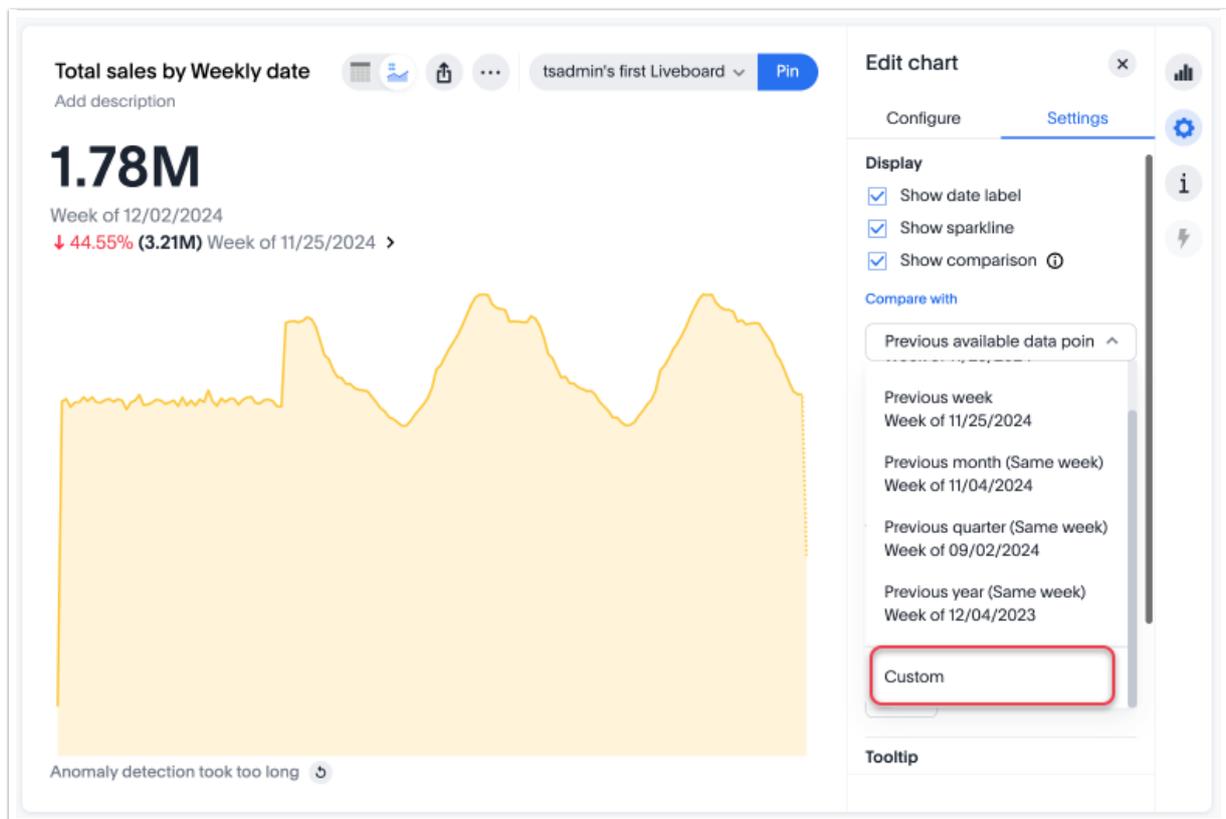
Custom comparison points
Previously, time-series KPI charts had limited options when comparing to past periods. A weekly KPI could be compared against the previous week, the previous month's same week, the previous quarter's same week, or the previous year's same week. Now, you can set a custom point in data against which Alchemer Dashboard compares the most recent data point, any number of weeks

ago.

To set your KPI's custom comparison point, follow these steps:

1. Navigate to Search data and create a time-series KPI, by searching for a measure and a date keyword, such as `sales weekly` , and selecting the KPI chart type.

2. Open the **Edit chart configuration** menu and select **Settings**.

3. Under **Compare with**, select **Custom** from the dropdown.

4. Enter the numerical value of the desired custom comparison point in the text box that appears. For example, you can select to compare the most recent data point to **3 weeks ago**.
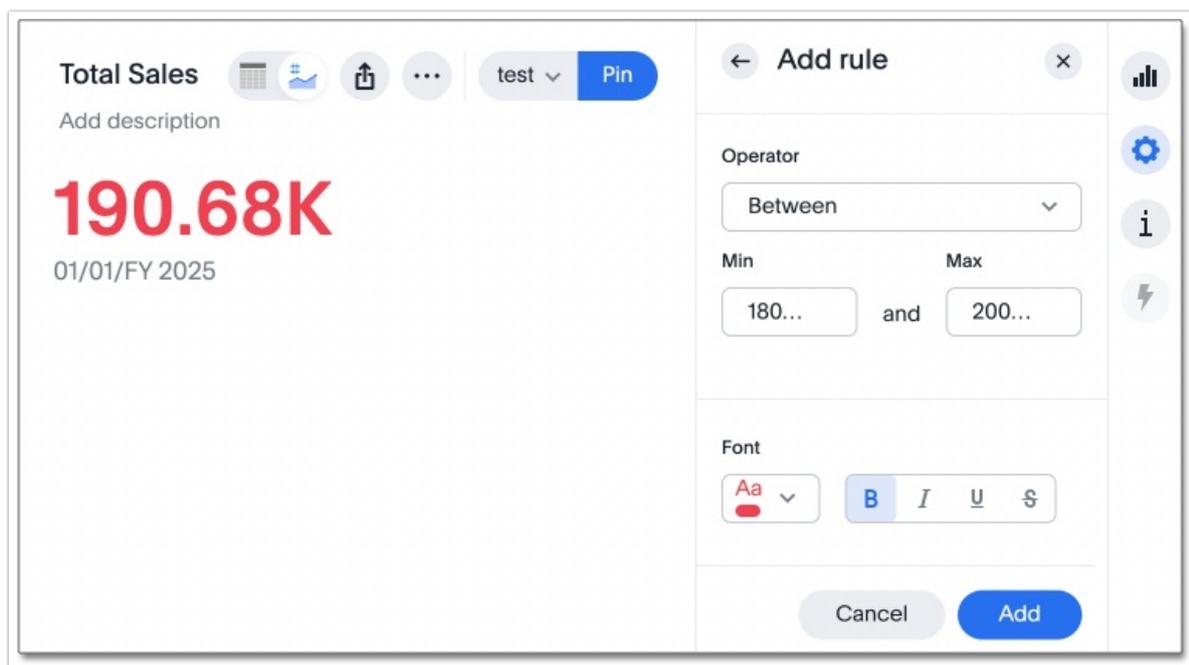
Apply conditional formatting

You can add visual cues for KPIs or threshold metrics to easily show where you are falling short or exceeding targets. These visual cues are called conditional formatting, which applies color and font formatting to your search result. Add conditional formatting to show the threshold(s) you defined, and the data that falls within them will be shown using the same color.

Conditional formatting affects the text of a KPI visualization, it does not appear in sparkline

visualizations.

To apply conditional formatting to your KPI, follow these steps:

1. Select the **chart configuration** icon to the right of your KPI.

2. Select the measure tile under the **Visualized** section, for example, "Total Sales".

3. Under the **Conditional formatting** dropdown menu, select **Edit**.

4. Define the values of your range and set the formatting options. In the following example, the KPI text turns red and bold when its value satisfies the condition, "between 180,000 and 200,000".

1. With conditional formatting you can compare the values of your KPI to another column as well as to a threshold.

2. Select **Add**.
View the conditional formatting rule(s) applied to a KPI by selecting the information icon that appears to the right of the measure.
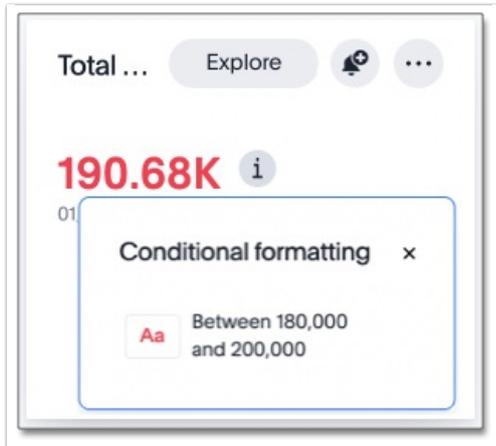
KPI change analysis

You can now use AI Highlights analysis to directly identify the key drivers for recent change in your KPIs. KPI change analysis allows you to drill down into the causes of change in your KPIs and customize the insights generated by AI Highlights.

To access this feature, go to your KPI chart and select the caret icon to the right of the percent change label. The **Run change analysis** pop-up allows you to customize the columns Alchemer Dashboard analyzes. Note that Alchemer Dashboard runs change analysis between the two most recent data points defined by the KPI's time bucket (for example, `daily` or `weekly`).

For more information on comparative analysis in Alchemer Dashboard, see Change analysis.

Monitor your KPI

When you pin a KPI visualization to a Dashboard or save it as a Chart, you can create alert notifications for yourself and others. You must have **view** access to the KPI's data source to schedule notifications for yourself. You must have **edit** access to the underlying data source to schedule notifications for teammates regardless of whether they have access.

For more information on the **Alerts** feature, see Alerts Key Performance Indicators in your data.

Limitations

You can't create a KPI chart from a search that includes the keywords "growth" or "versus".

Related Articles