Visualization types in Power BI

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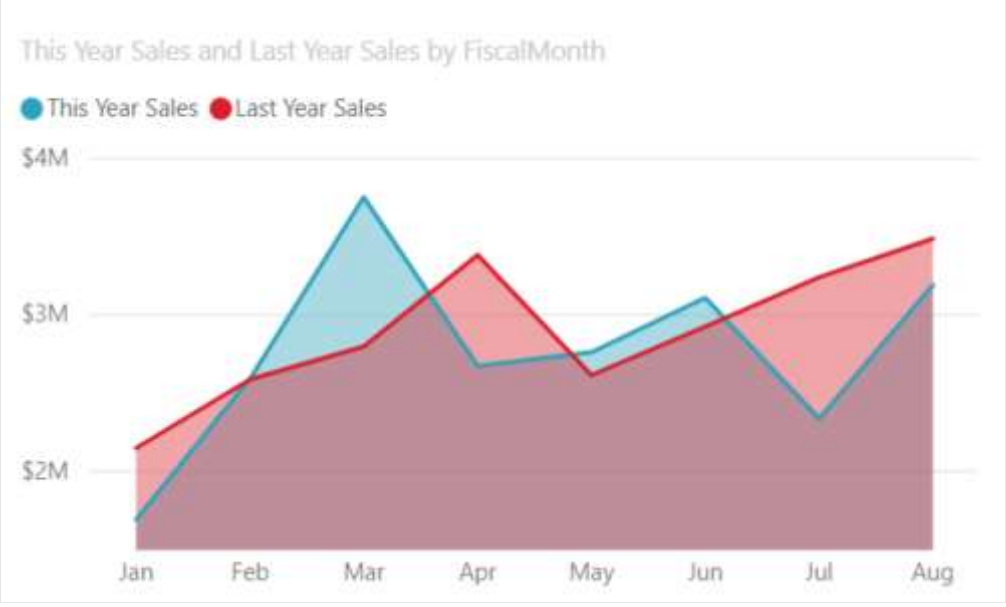
A visualization is an image created from data. Visualizations are also called "visuals." Some examples of visuals are: pie chart, line chart, map, and KPI. This article lists visualizations available in Power BI. We add new visualizations. Stay tuned!

And check out the Microsoft AppSource, where you find a growing list of Power BI visuals you can download and use in your own dashboards and reports. Feeling creative? Learn how to create and add your own visuals to this community site.

Visualizations in Power BI

All of these visualizations can be added to Power BI reports, specified in Q&A, and pinned to dashboards.

Area charts: Basic (Layered) and Stacked



The basic area chart is based on the line chart with the area between the axis and line filled in. Area charts emphasize the magnitude of change over time, and can be used to draw attention to the total value across a trend. For example, data that represents profit over time can be plotted in an area chart to emphasize the total profit. On the other hand, stacked area charts display the cumulative total of multiple data series stacked on top of each other, showing how each series contributes to the total.

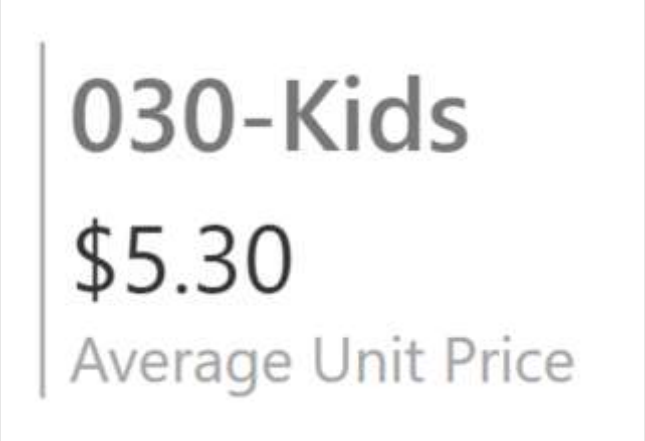
For more information, see Basic Area chart.

Bar and column charts

Bar charts are the standard for looking at a specific value across different categories.

Cards

Multi row



Multi row cards display one or more data points, one per row.

Single number

Single number cards display a single fact, a single data point. Sometimes a single number is the most important thing you want to track in your Power BI dashboard or report, such as total sales, market share year over year, or total opportunities.

For more information, see Create a Card (big number tile).

Combo charts

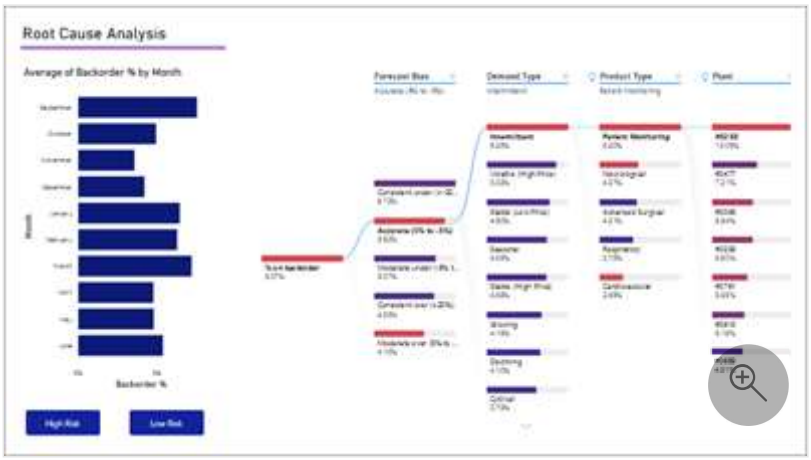
A combo chart combines a column chart and a line chart. Combining the two charts into one lets you make a quicker comparison of the data. Combo charts can have one or two Y axes, so be sure to look closely.

Combo charts are a great choice:

- When you have a line chart and a column chart with the same X axis.
- To compare multiple measures with different value ranges.
- To illustrate the correlation between two measures in one visual.
- To check whether one measure meets the target, which is defined by another measure.
- To conserve canvas space.

For more information, see Combo charts in Power BI.

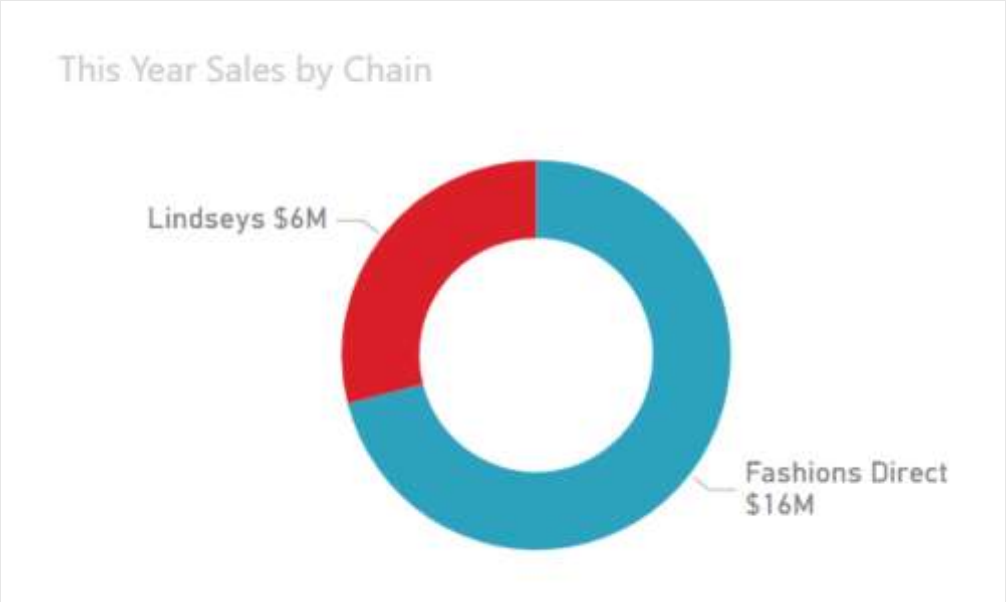
Decomposition tree



The decomposition tree visual lets you visualize data across multiple dimensions. It

order. It is also an artificial intelligence (AI) visualization, so you can ask it to find the next dimension to drill down into based on certain criteria. This capability makes it a valuable tool for ad hoc exploration and conducting root cause analysis.

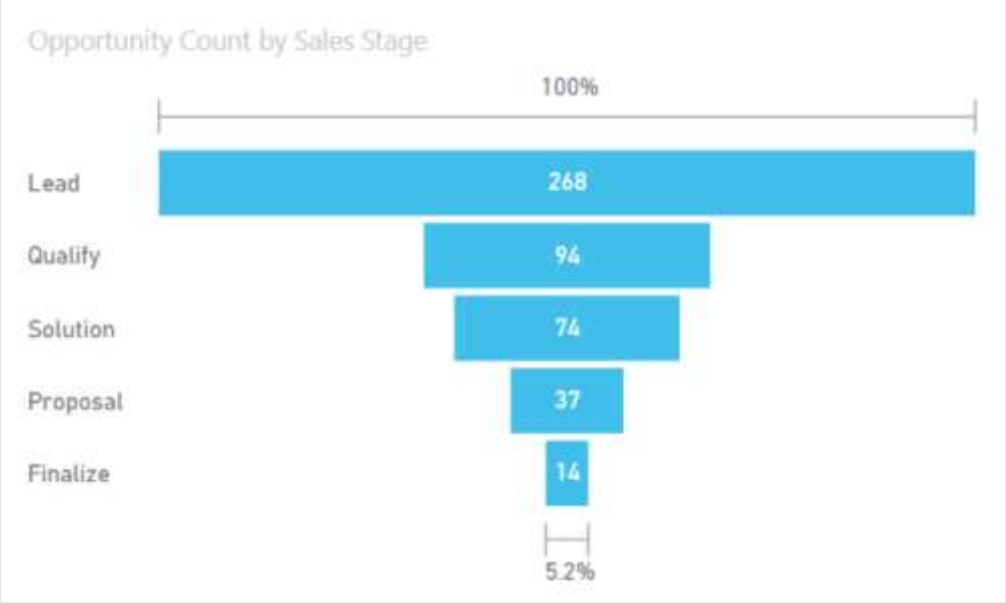
Doughnut charts



Doughnut charts are similar to pie charts. They show the relationship of parts to a whole. The only difference is that the center is blank and allows space for a label or icon.

For more information, see Doughnut charts in Power BI.

Funnel charts



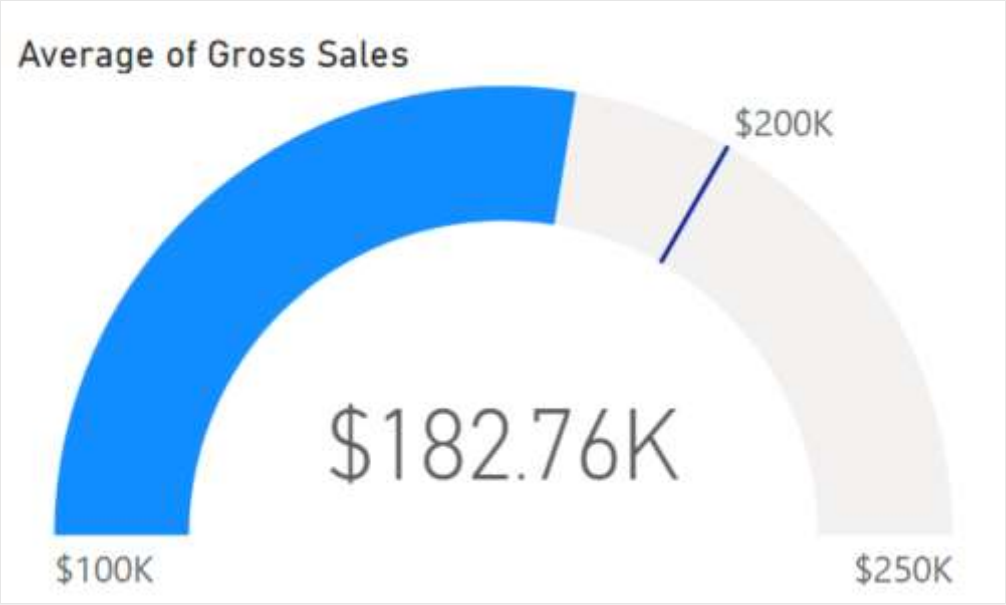
Funnels help visualize a process that has stages, and items flow sequentially from one

purchase fulfillment.

For example, a sales funnel that tracks customers through stages: Lead > Qualified Lead > Prospect > Contract > Close. At a glance, the shape of the funnel conveys the health of the process you're tracking. Each funnel stage represents a percentage of the total. So, in most cases, a funnel chart is shaped like a funnel -- with the first stage being the largest, and each subsequent stage smaller than its predecessor. A pear-shaped funnel is also useful -- it can identify a problem in the process. But typically, the first stage, the "intake" stage, is the largest.

For more information, see Funnel Charts in Power BI.

Gauge charts



A radial gauge chart has a circular arc and displays a single value that measures progress toward a goal. The goal, or target value, is represented by the line (needle). Progress toward that goal is represented by the shading. And the value that represents that progress is shown in bold inside the arc. All possible values are spread evenly along the arc, from the minimum (left-most value) to the maximum (right-most value).

In the example, we are a car retailer, tracking our Sales team's average sales per month. Our goal is 200,000 and represented by the location of the needle. The minimum possible average sales is 100,000 and we set the maximum as 250,000. The blue shading shows that we're currently averaging approximately $180,000 this month. Luckily, we still have another week to reach our goal.

Radial gauges are a great choice to:

- Show progress toward a goal

- Represent a percentile measure, like a KPI.
- Show the health of a single measure.
- Display information that can be quickly scanned and understood.

For more information, see Gauge Charts in Power BI.

Key influencers chart

A key influencer chart displays the major contributors to a selected result or value.

Key influencers are a great choice to help you understand the factors that influence a key metric. For example, *what influences customers to place a second order* or *why were sales so high last June*.

For more information, see Key influencer charts in Power BI

KPIs

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

KPIs are a great choice:

- To measure progress (what am I ahead or behind on?).
- To measure distance to a metric (how far ahead or behind am I?).

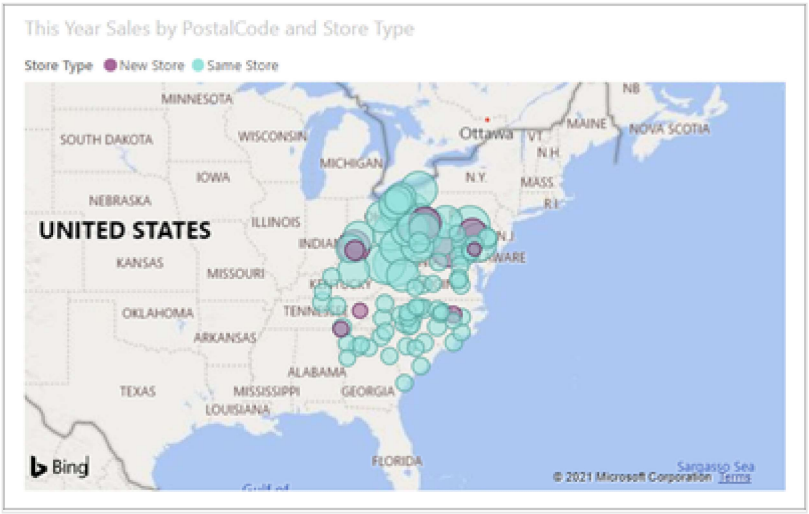
For more information, see KPIs in Power BI.

Line charts

Line charts emphasize the overall shape of an entire series of values, usually over time.

Maps

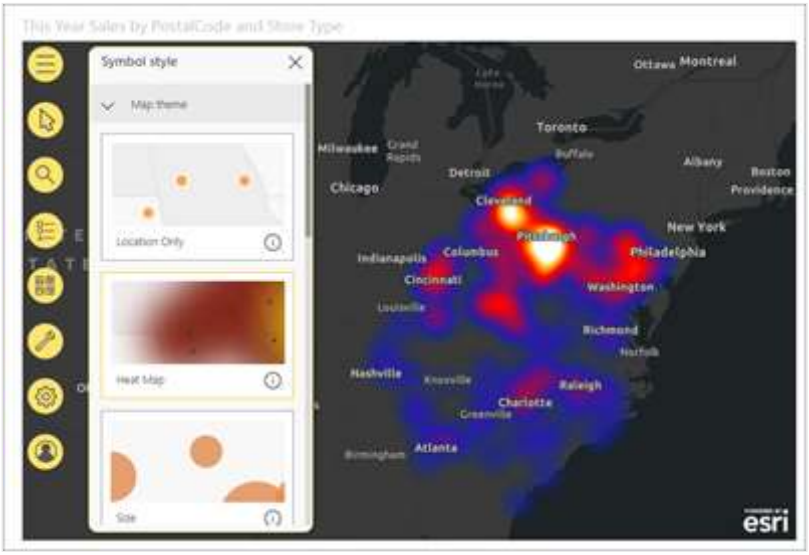
Basic map



Use a basic map to associate both categorical and quantitative information with spatial locations.

For more information, see Tips and tricks for map visuals.

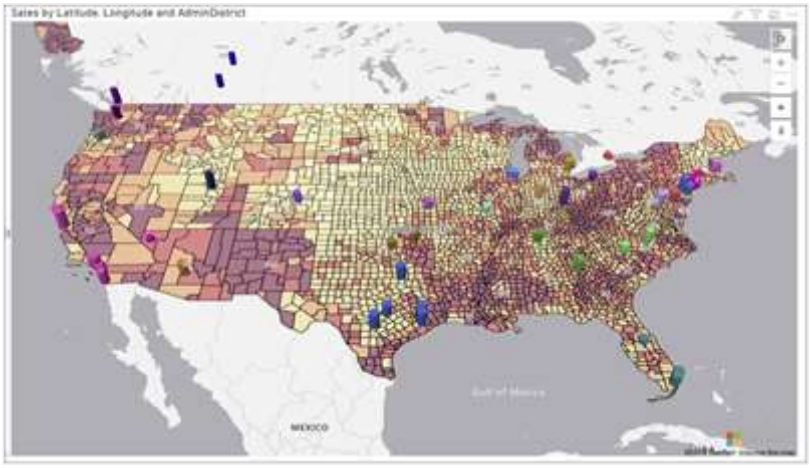
ArcGIS map



The combination of ArcGIS maps and Power BI takes mapping beyond the presentation of points on a map to a whole new level. The available options for base maps, location types, themes, symbol styles, and reference layers creates gorgeous informative map visuals. The combination of authoritative data layers (such as census data) on a map with spatial analysis conveys a deeper understanding of the data in your visual.

For more information, see ArcGIS maps in Power BI.

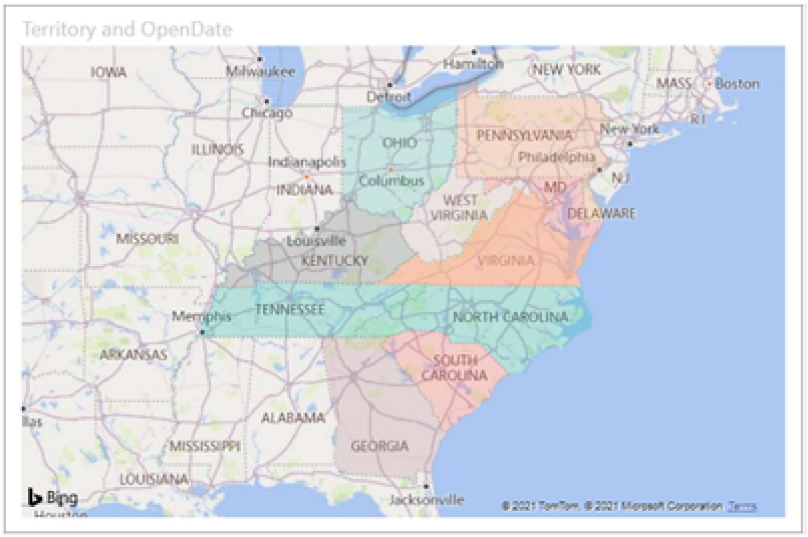
Azure map



> **Tip**
>
> Used to associate both categorical and quantitative information with spatial locations.

For more information, see Azure Maps visual for Power BI.

Filled map (Choropleth)

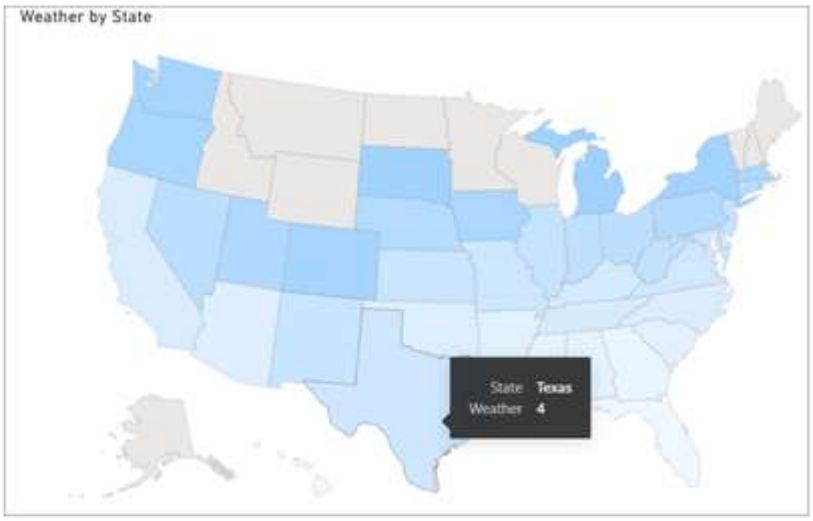


A filled map uses shading or tinting or patterns to display how a value differs in proportion across a geography or region. Quickly display these relative differences with shading that ranges from light (less-frequent/lower) to dark (more-frequent/more).

> **Tip**
>
> The more intense the color, the larger the value.

For more information, see Filled Maps in Power BI.

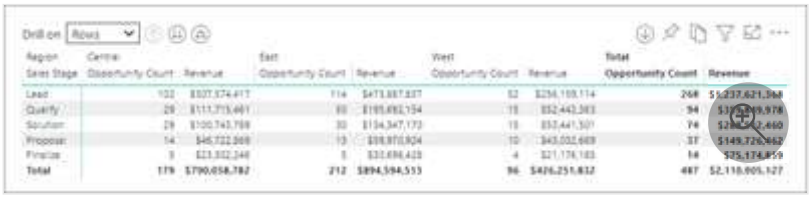
Shape map



Shape maps compare regions on a map using color. A shape map can't show precise geographical locations of data points on a map. Instead, its main purpose is to show relative comparisons of regions on a map by coloring them differently.

For more information, see Shape Maps in Power BI.

Matrix



The matrix visual is a type of table visual (see Tables in this article) that supports a stepped layout. A table supports two dimensions, but a matrix makes it easier to display data meaningfully across multiple dimensions. Often, report designers include matrixes in reports and dashboards to allow users to select one or more element (rows, columns, cells) in the matrix to cross-highlight other visuals on a report page.

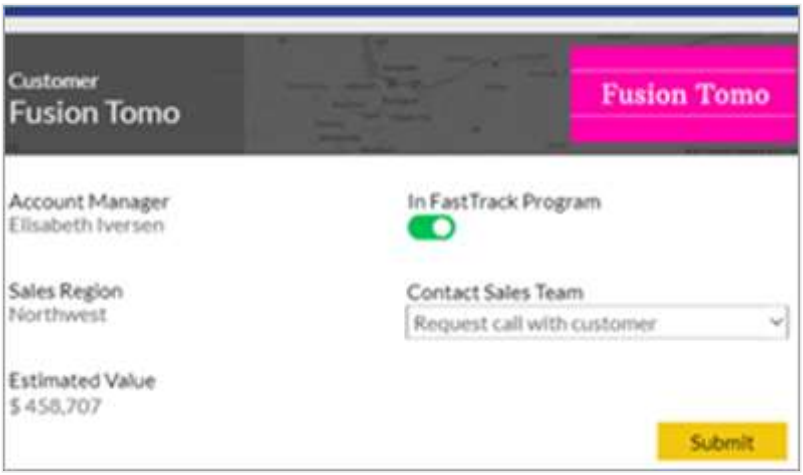
> **Tip**
>
> The matrix automatically aggregates the data and enables drilling down into the data.

For more information, see Matrix visuals in Power BI.

Pie charts

Pie charts show the relationship of parts to a whole.

Power Apps visual



Report designers can create a Power App and embed it into a Power BI report as a visual. Consumers can interact with that visual within the Power BI report.

For more information, see Add a Power Apps visual to your report.

Q&A visual