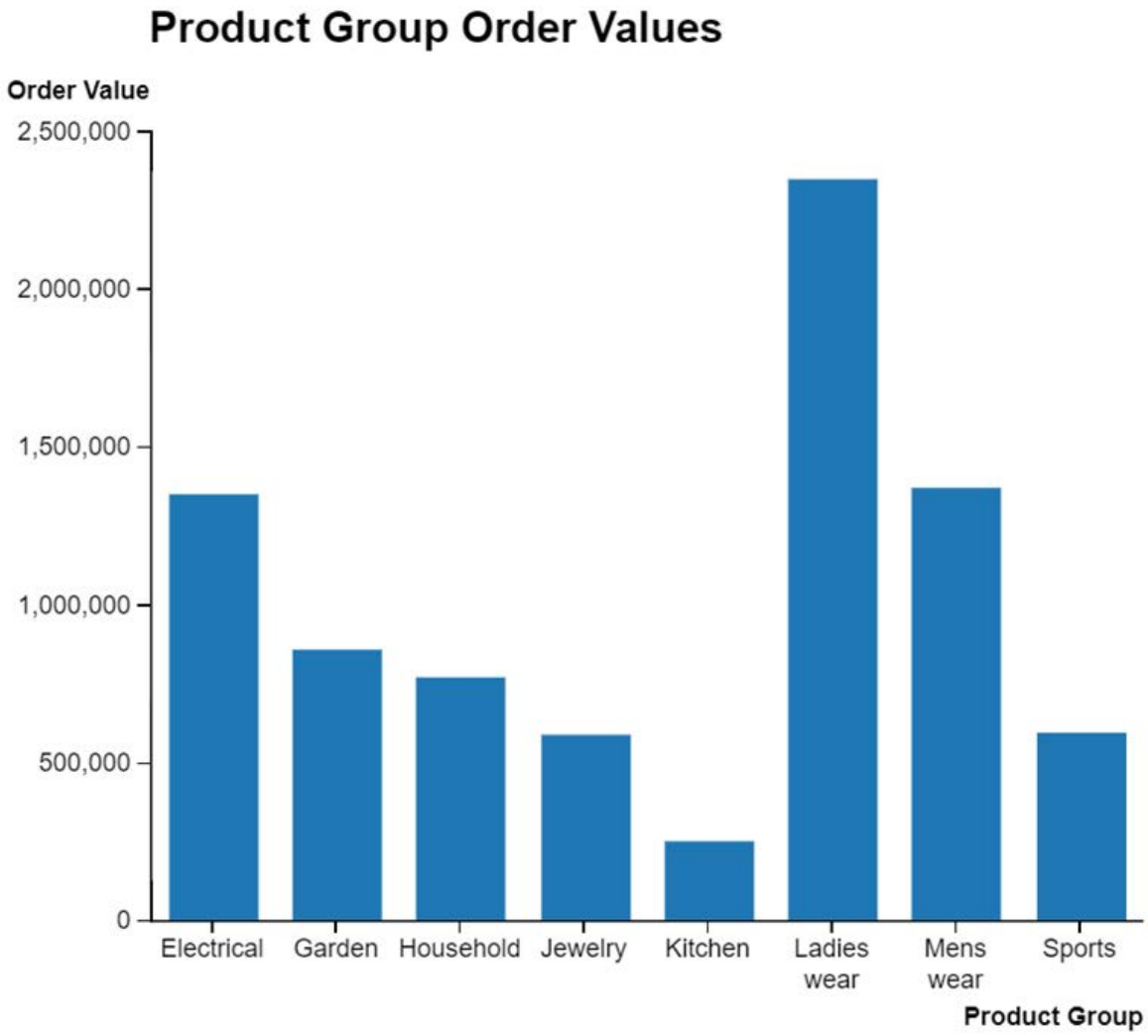
Chart Examples

Bar

Use Bar charts to:

- Show comparisons. The first Bar chart shows an example that compares the order values for the product groups. Click the **Run Example** button below the Bar chart to see it in Cyberquery.
- Track changes over time. The second Bar chart shows an example of tracking how order values change by quarter and year. The regression lines show that the order values generally increase annually in each quarter of the year. Click the **Run Example** button below the Bar chart to see it in Cyberquery.

The X-axis usually displays categories, and the Y-axis usually displays values.



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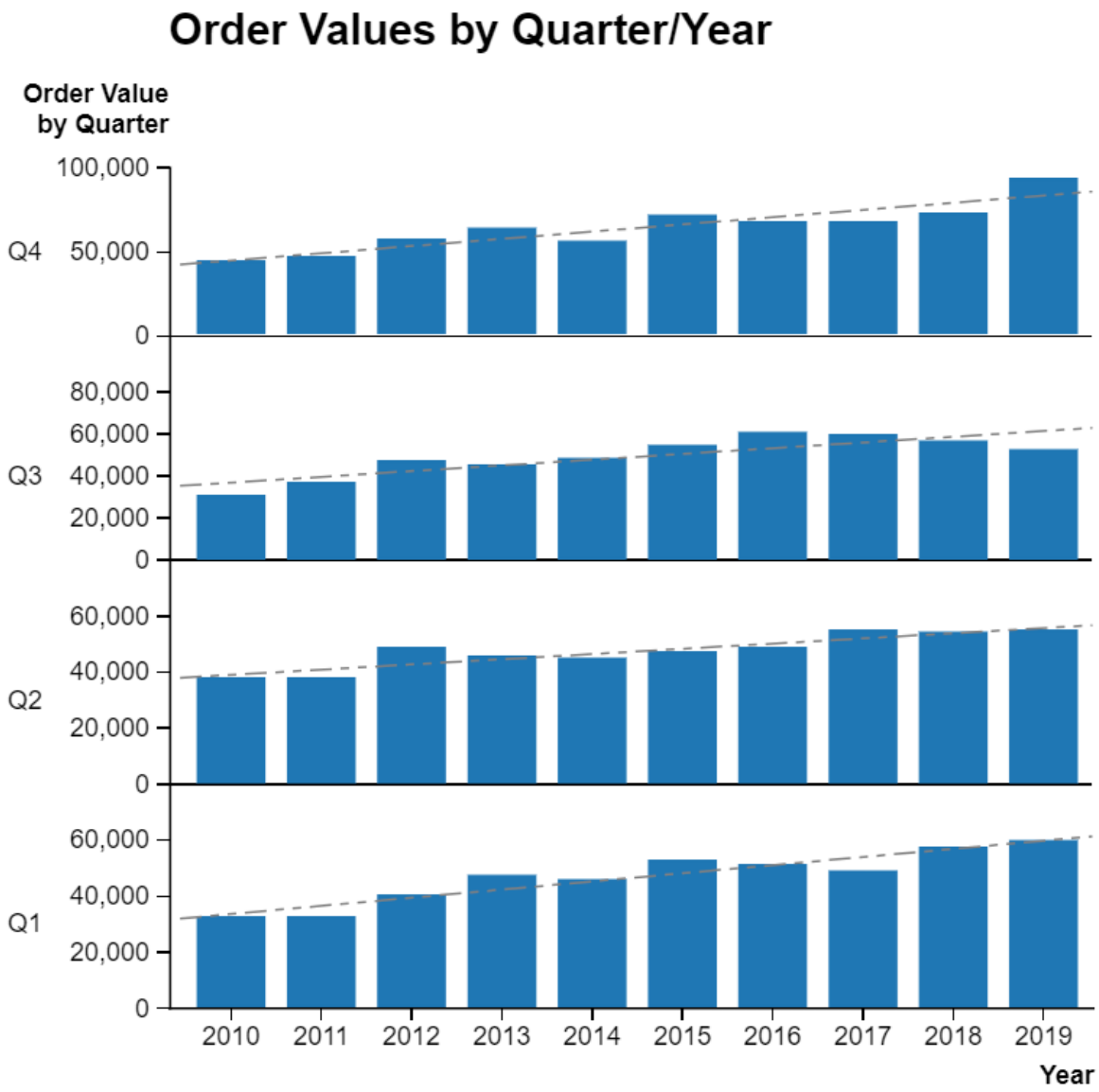
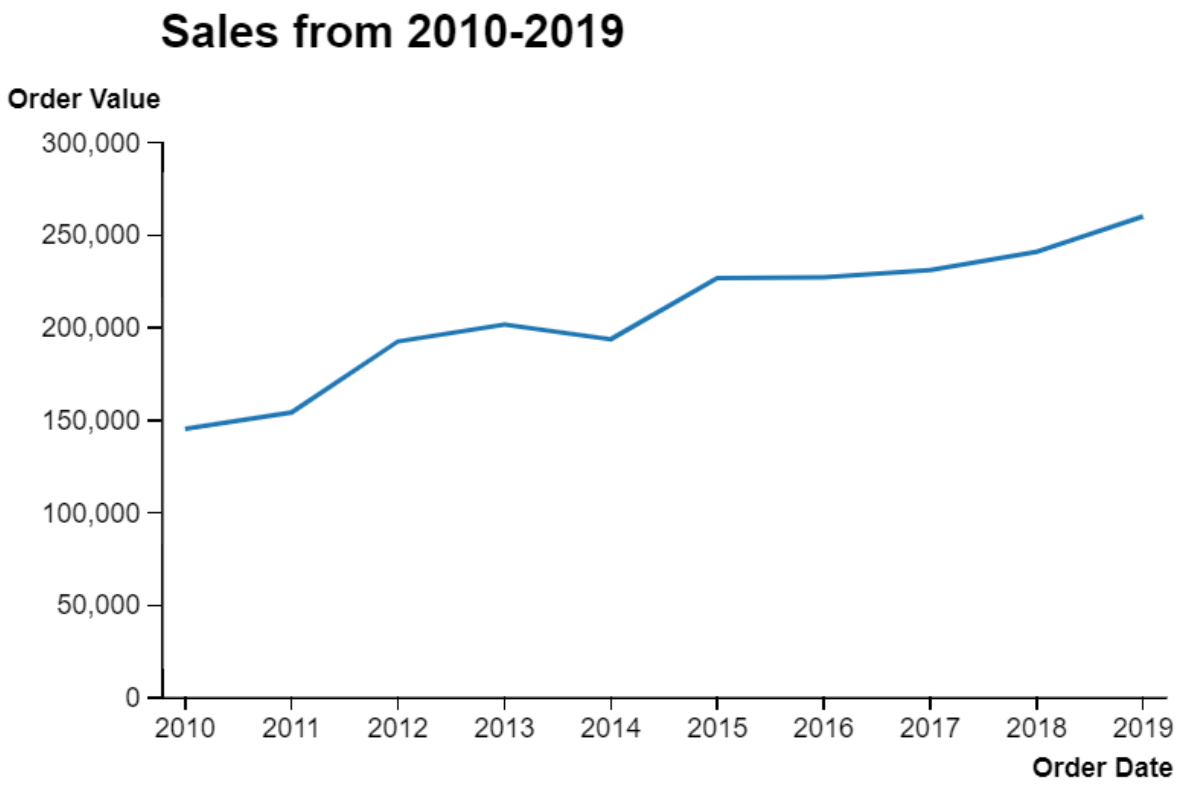


(src: query_sources/ccv9/intro_bar_chart_example_02.eq)

Line

Use Line charts to:

- Track changes over time to identify trends and plot values that are interpolated linearly (that is, you can take a guess at a value midway between the two plotted points). While you can also use Bar charts to track changes over time, Line charts can better display minute changes. The first Line chart shows an example of how sales increase over time. Click the **Run Example** button below the Line chart to see it in Cyberquery.
- Compare changes over the same period of time for two or more groups to identify trends.
- Plot values that interpolate naturally using smooth Line charts (that is, data that is sampled from the real world). The second Line chart shows an example of a smooth Line chart comparing newsletter registrations amongst six age groups. The regression lines show that registrations generally increase as you approach the 4th quarter. Click the **Run Example** button below the Line chart to see it in Cyberquery.



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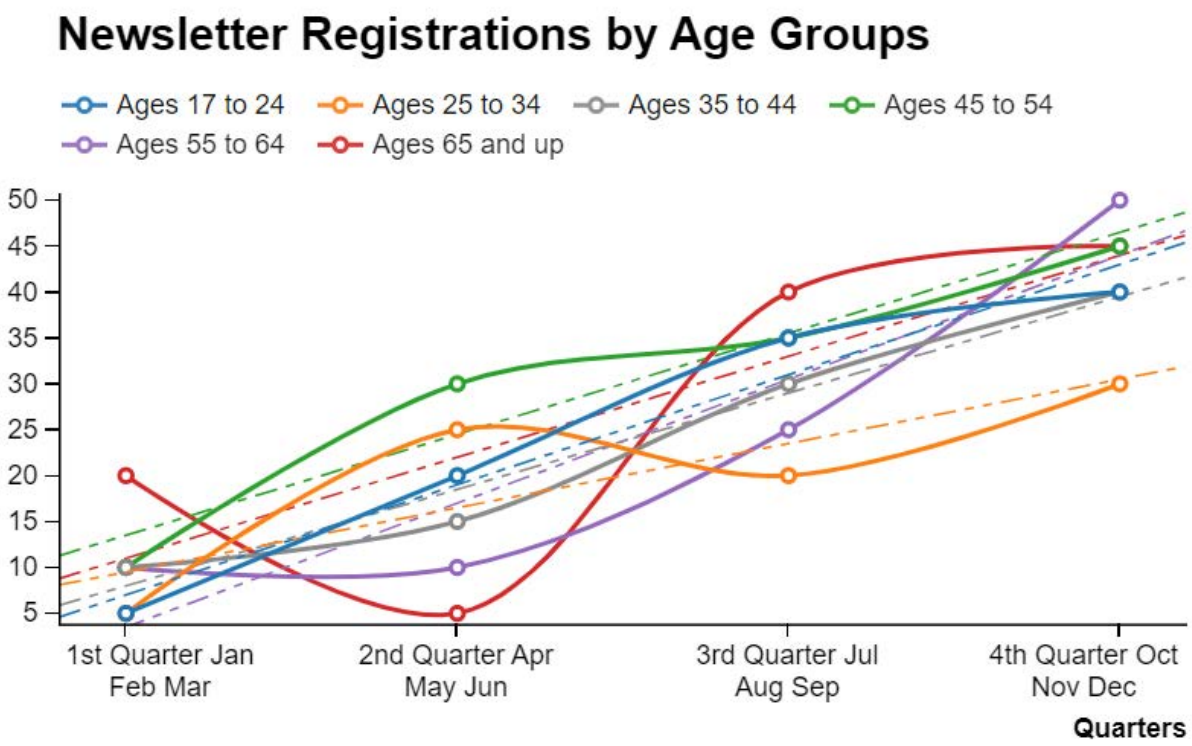


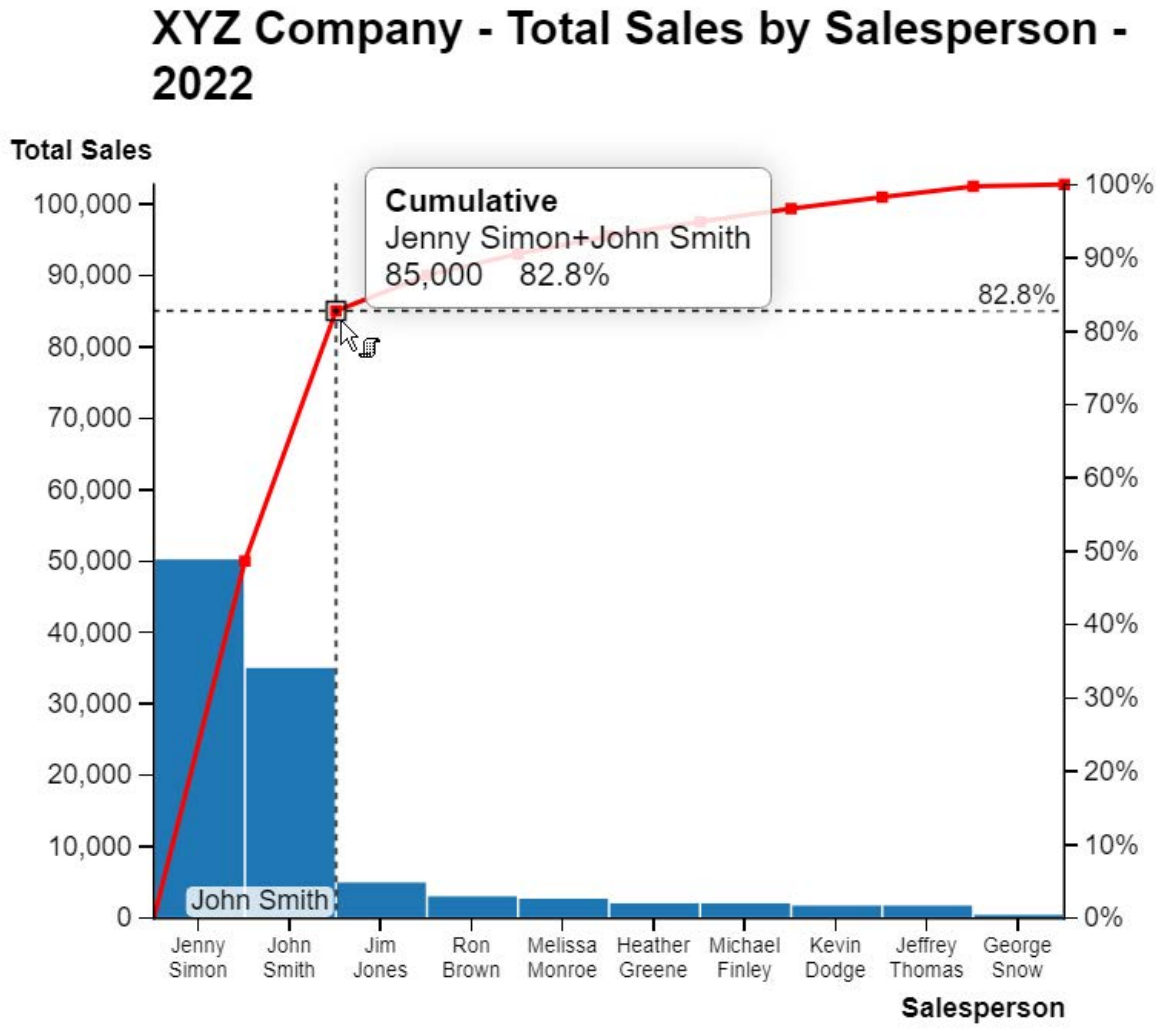
(src: query_sources/ccv9/intro_line_chart_example_02.eq)

Pareto

A Pareto chart is a combination of a Bar and Line chart that represents the Pareto principle where 80% of the outcomes represent 20% of the inputs. The lengths of the bars can represent frequency, cost, time, money, etc. and are arranged in descending order from left to right to depict visually which items are more significant. The Line chart shows the cumulative totals of each category. You can apply a Pareto chart in areas like management, manufacturing, and human resources.

The first example shows how 80% of the sales are driven by two individuals. Click the **Run Example** button below the first Pareto chart to see it in Cyberquery. Hover over the data points on the red line in Cyberquery to see that the sales totals for Jenny Simon and John Smith comprise over 80% of total sales.

The second example shows how correcting the sizing, hem, and cuff defects will address 60% of the manufacturing defects for an item. Click the **Run Example** button below the second Pareto chart to see it in Cyberquery. Hover over the data points on the red line in Cyberquery to see that the defects for sizing, hems, and cuffs comprise over 60% of the defects.



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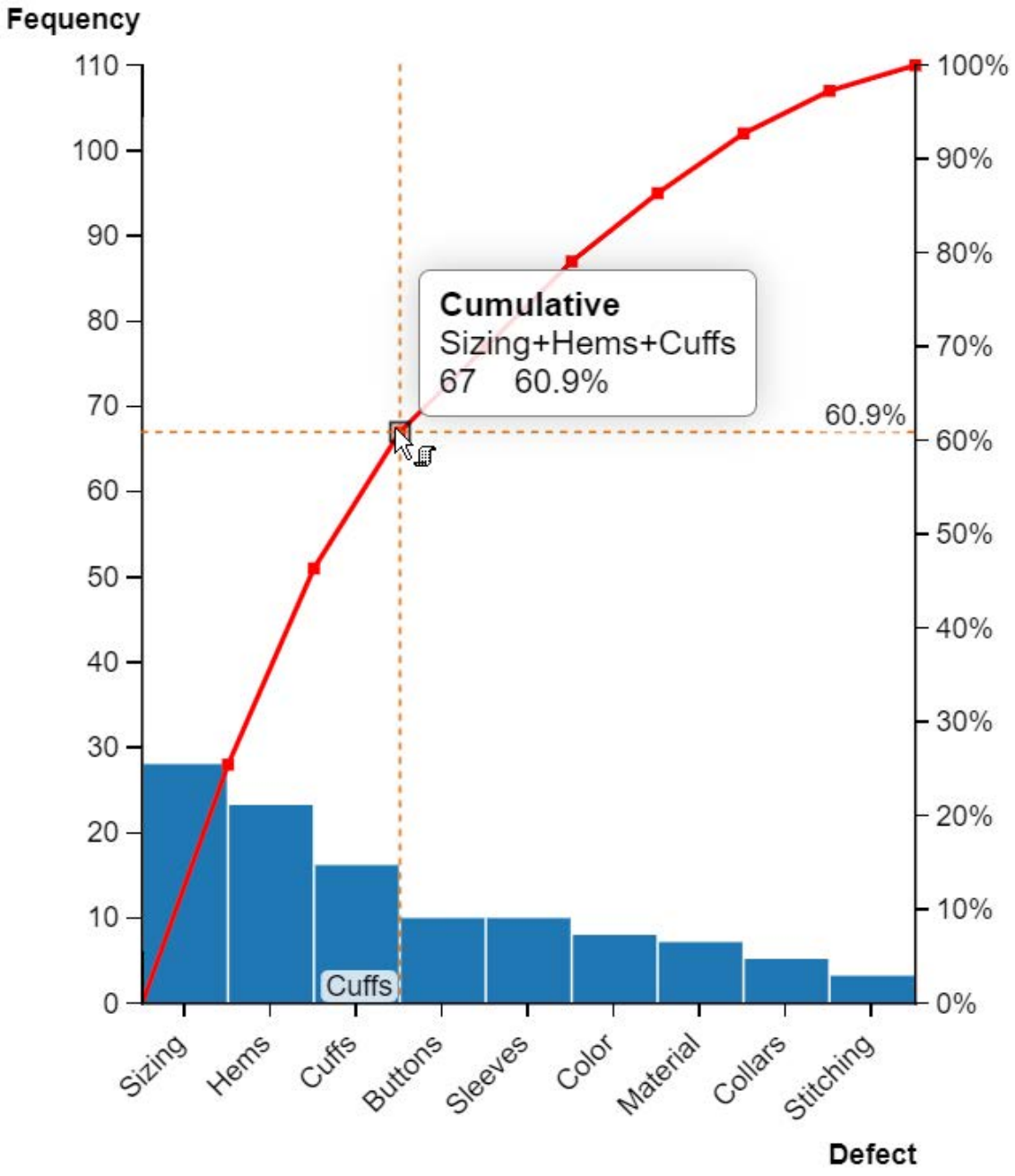


(src: query_sources/ccv9/pareto_chart_example_2.eq)

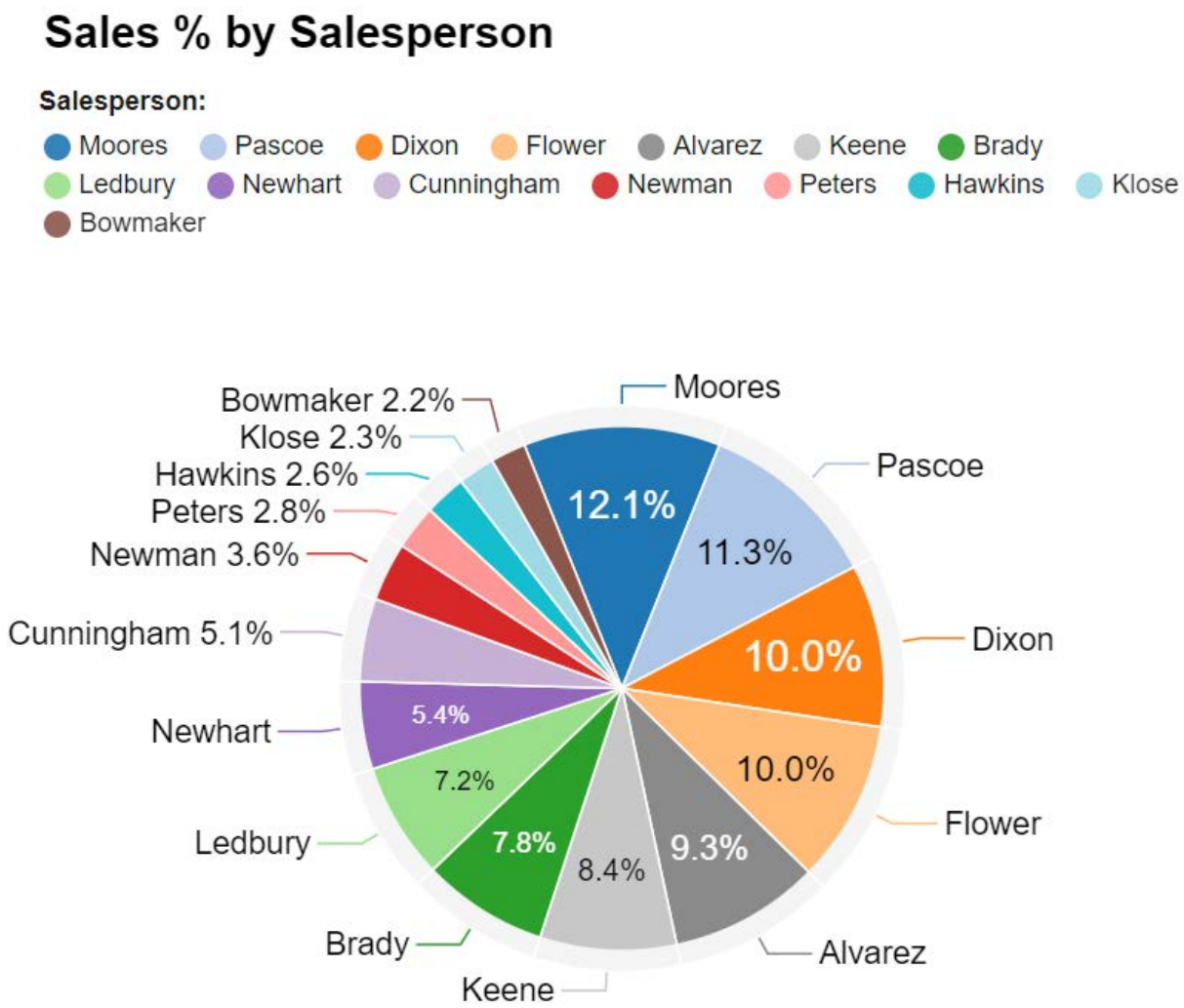
Pie and Doughnut Chart Examples

Pie and Doughnut

Use Pie or Doughnut charts to see how each sector represents a portion of the whole. You can display multiple Pie and Doughnut charts on one page.

The Pie chart example shows the percentage of sales by salesperson. Click the **Run Example** button below the Pie chart to see it in Cyberquery.

The Doughnut chart example shows how sales for the top five states vary by year. Note how you can filter the data by selecting/deselecting check boxes in the legend. To learn more about filtering, see Using Data Filtering in a Chart. Click the **Run Example** button below the Doughnut chart to see it in Cyberquery.



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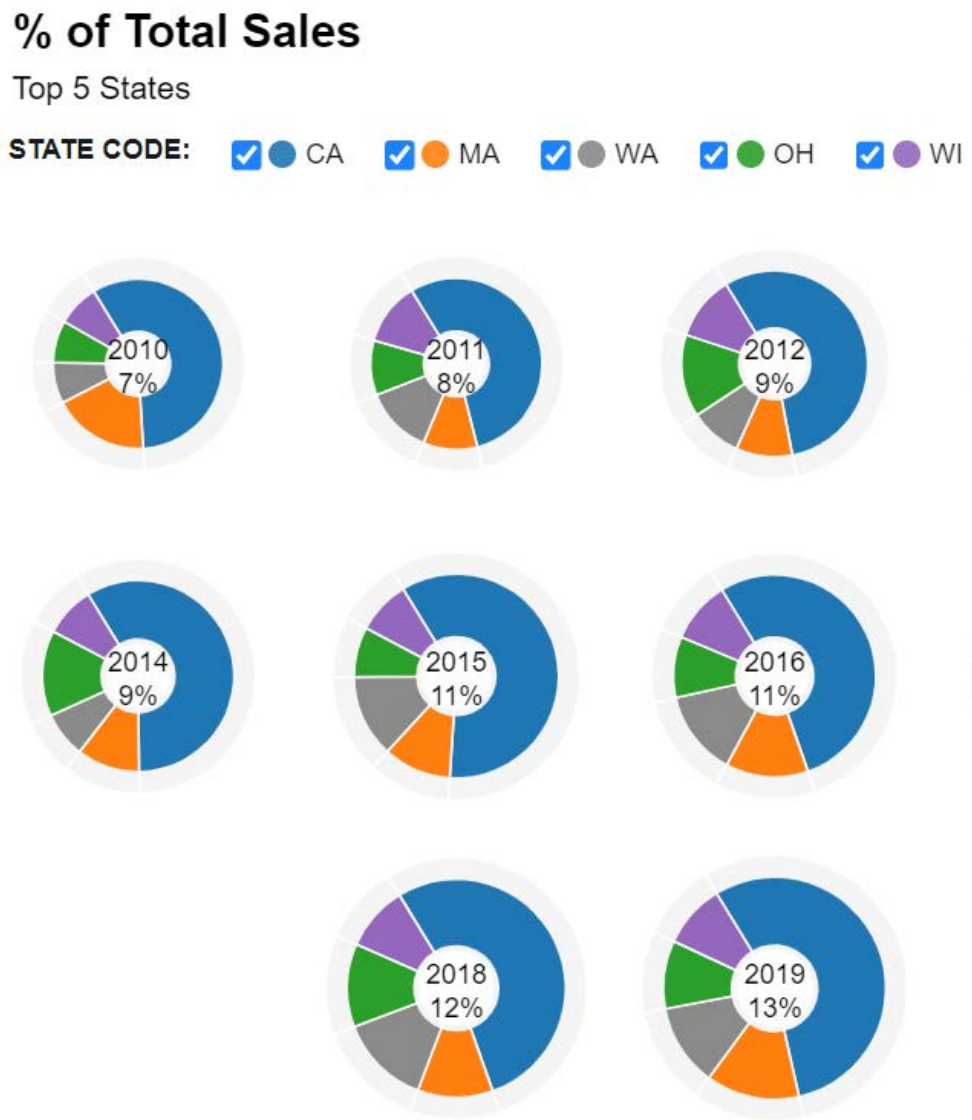


(src: query_sources/ccv9/doughnut_chart_selector_switch.eq)

Bubble Chart Examples

Bubble

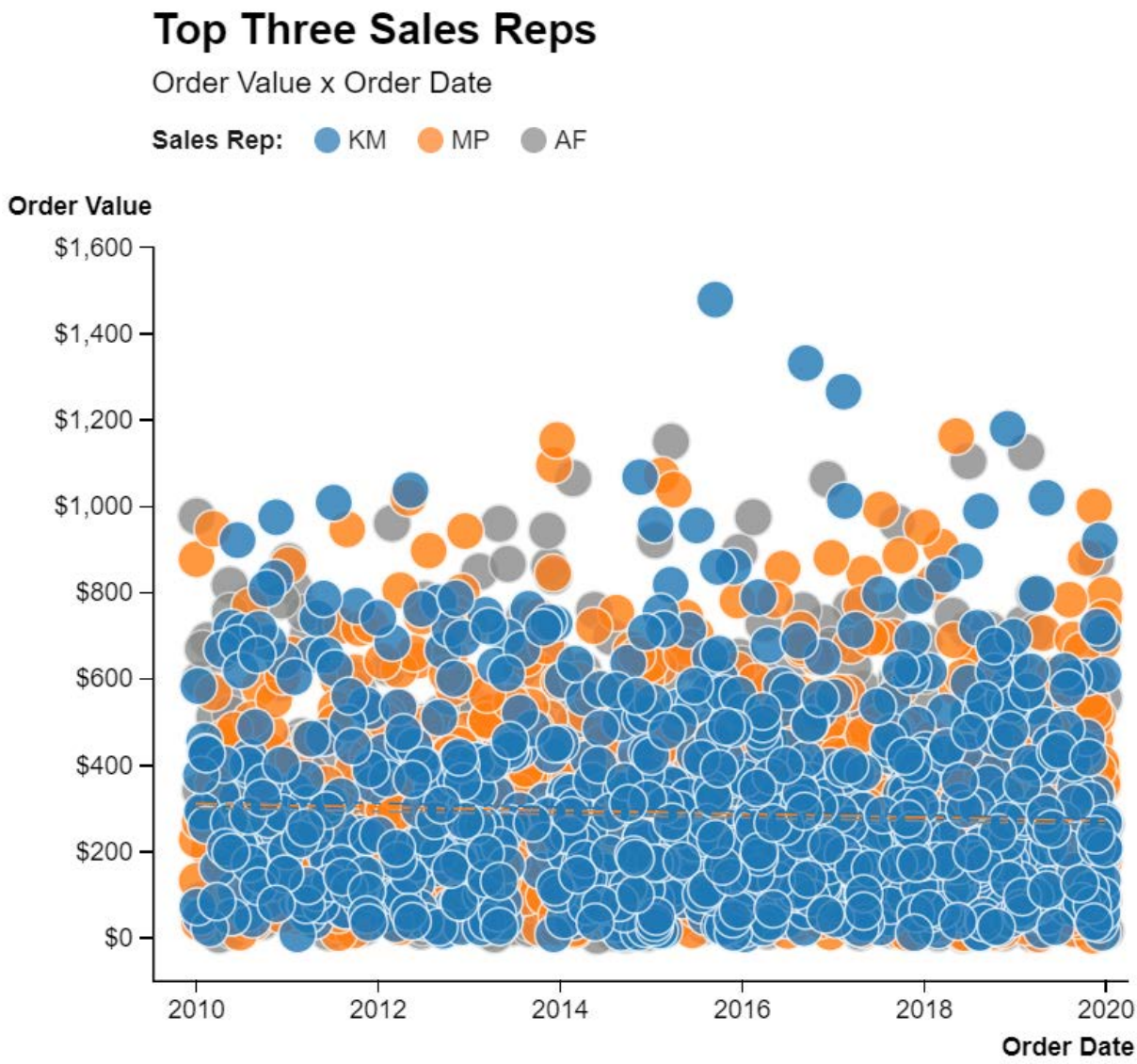
Use a Bubble chart to:

- display the relationship between three variables through the X- and Y-axis placement and the size of the bubble (sometimes called the Z-axis), allowing you to see patterns in the data. (Note that a Bubble chart is a variation of a Scatter chart. A Scatter chart shows the relationship between two variables on the X- and Y-axes.)
- display data values that cannot be interpolated (that is, you cannot make guesses between the data points collected via a line).

If you plot this same information as a Bar chart, Line chart, Pie chart, etc, you likely will not see the patterns.

The first example shows how order value (Y-axis) and order date (X-axis) relate to each other for the top three sales reps. Note that the bubble sizes (sometimes called the Z-axis) are equal and the chart includes regression lines for each of the sales reps. Click the **Run Example** button below the first chart to see it in Cyberquery.

The second example shows how the order date (Y-axis), order value (X-axis), and the processing time (sometimes called the Z-axis) relate to each other. Click the **Run Example** button below the second chart to see it in Cyberquery.



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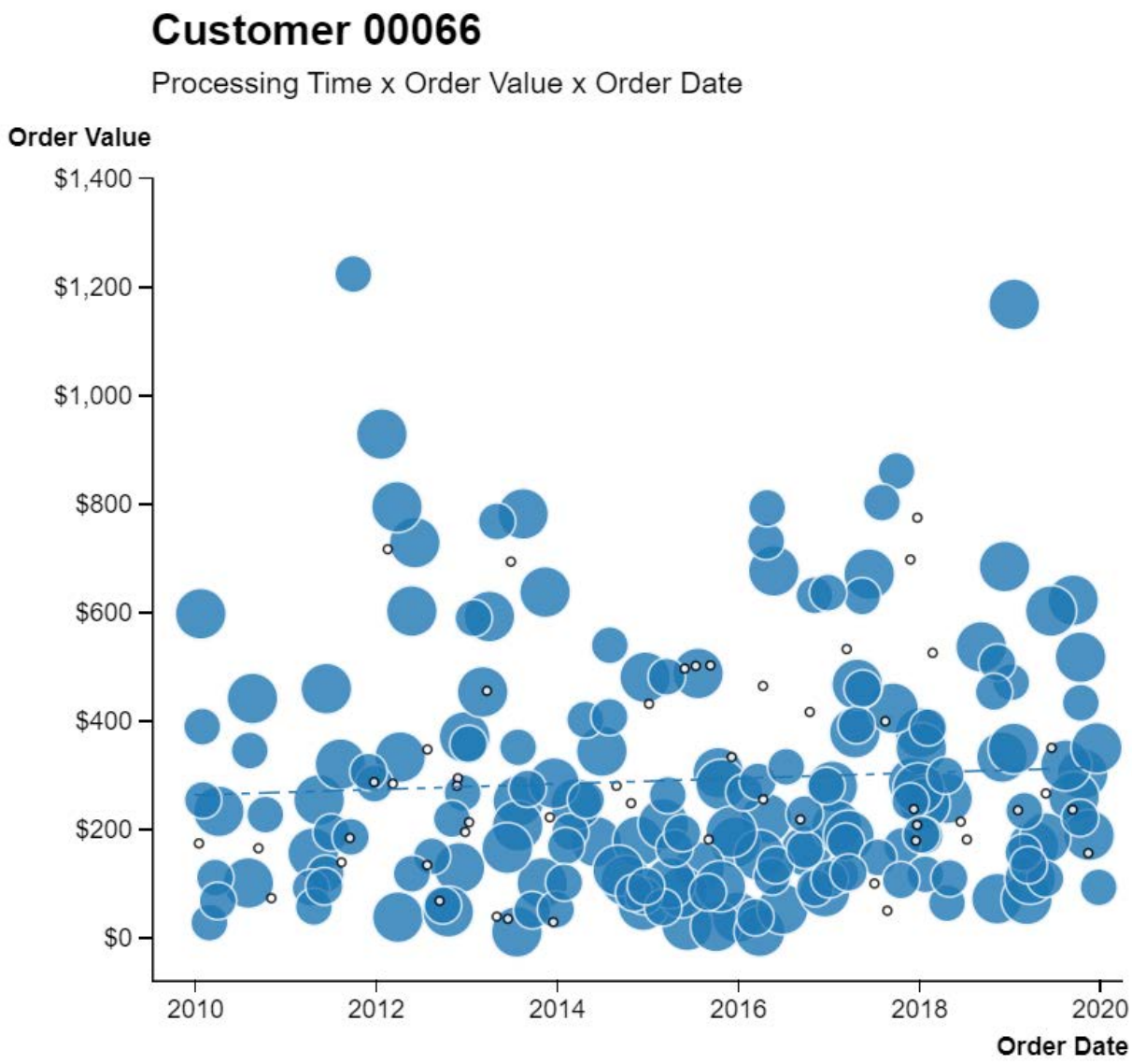


(src: query_sources/ccv9/bubble_chart_switch_example.eq)

Area Chart Examples

Area

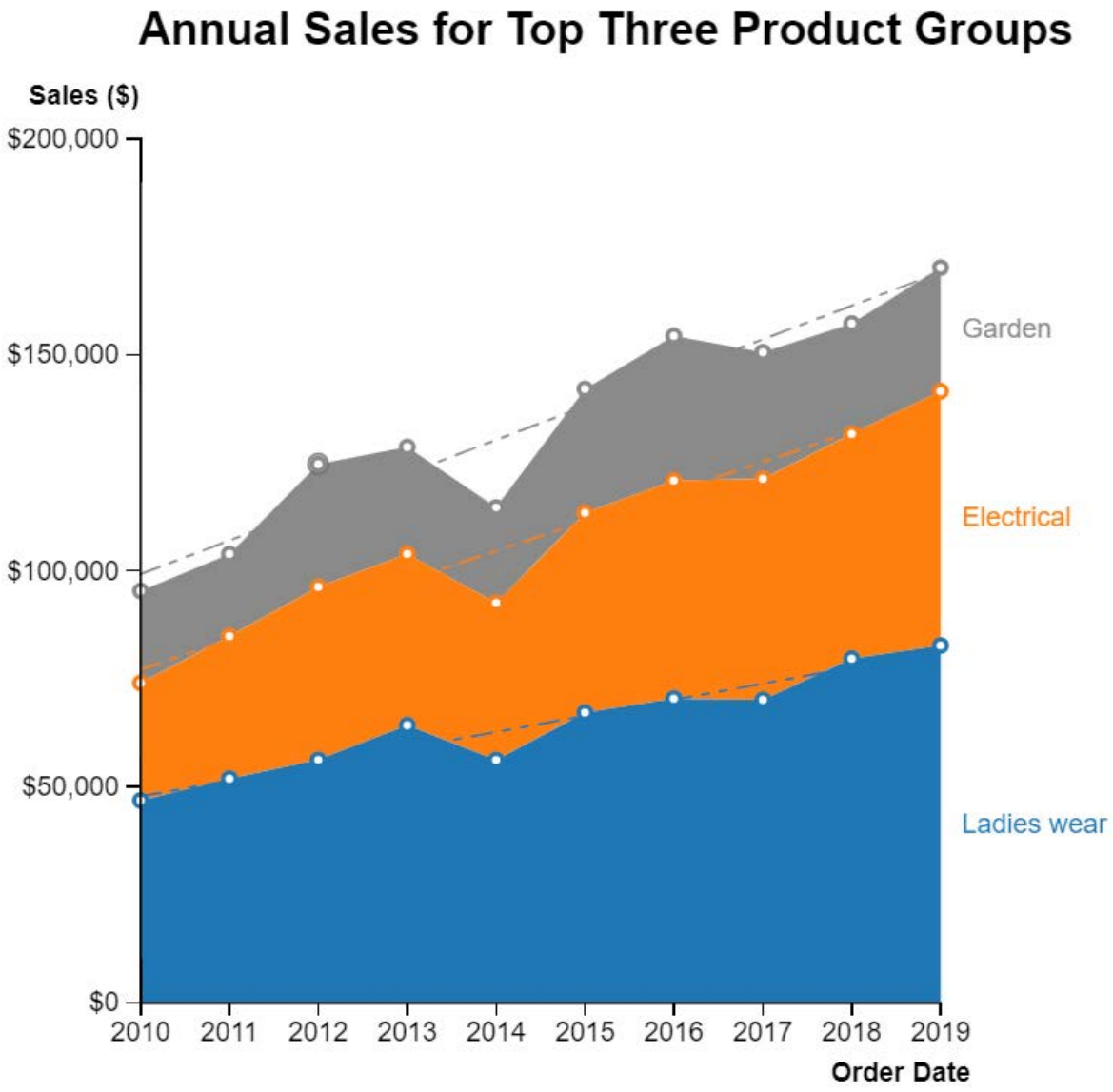
Use Area charts to:

- Track changes over time for one or more groups (similar to a Line chart).
- Show the sum of the plotted values to show the relationship of parts to the whole, illustrated by the shading between the lines.

An Area chart differs from a Line chart by including shading between the baseline and first line, and between the remaining lines.

The first example compares how annual product group sales change over time for the top three product groups. Note that the regression lines show that annual sales by product group generally increase by year. Click the **Run Example** button below the first Area chart to it in Cyberquery.

The second example compares how entries and exits from the park increase and then decrease at different times of the day. Click the **Run Example** button below the second Area chart to see it in Cyberquery.



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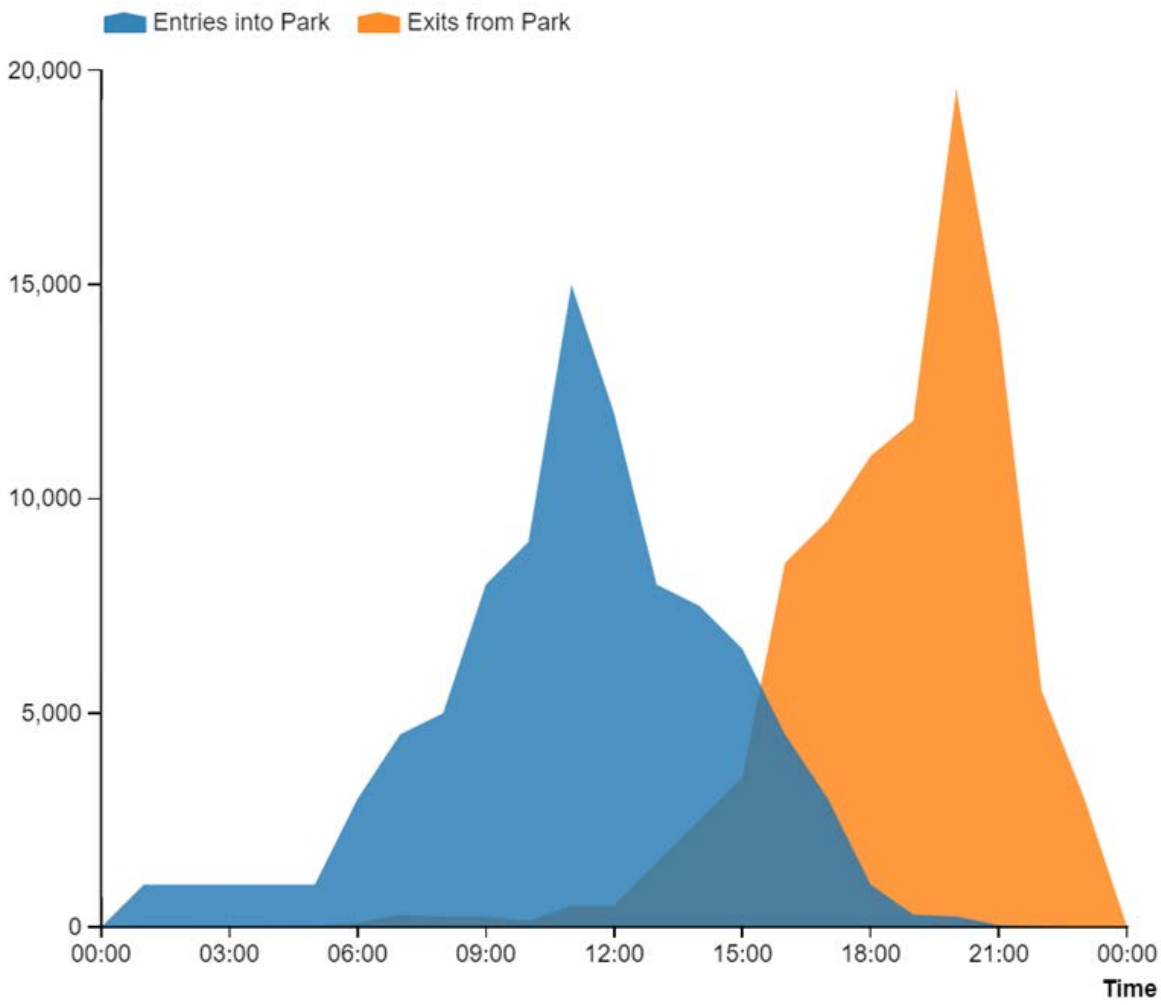


(src: query_sources/ccv9/chart_properties_area_chart_comparative.eq)

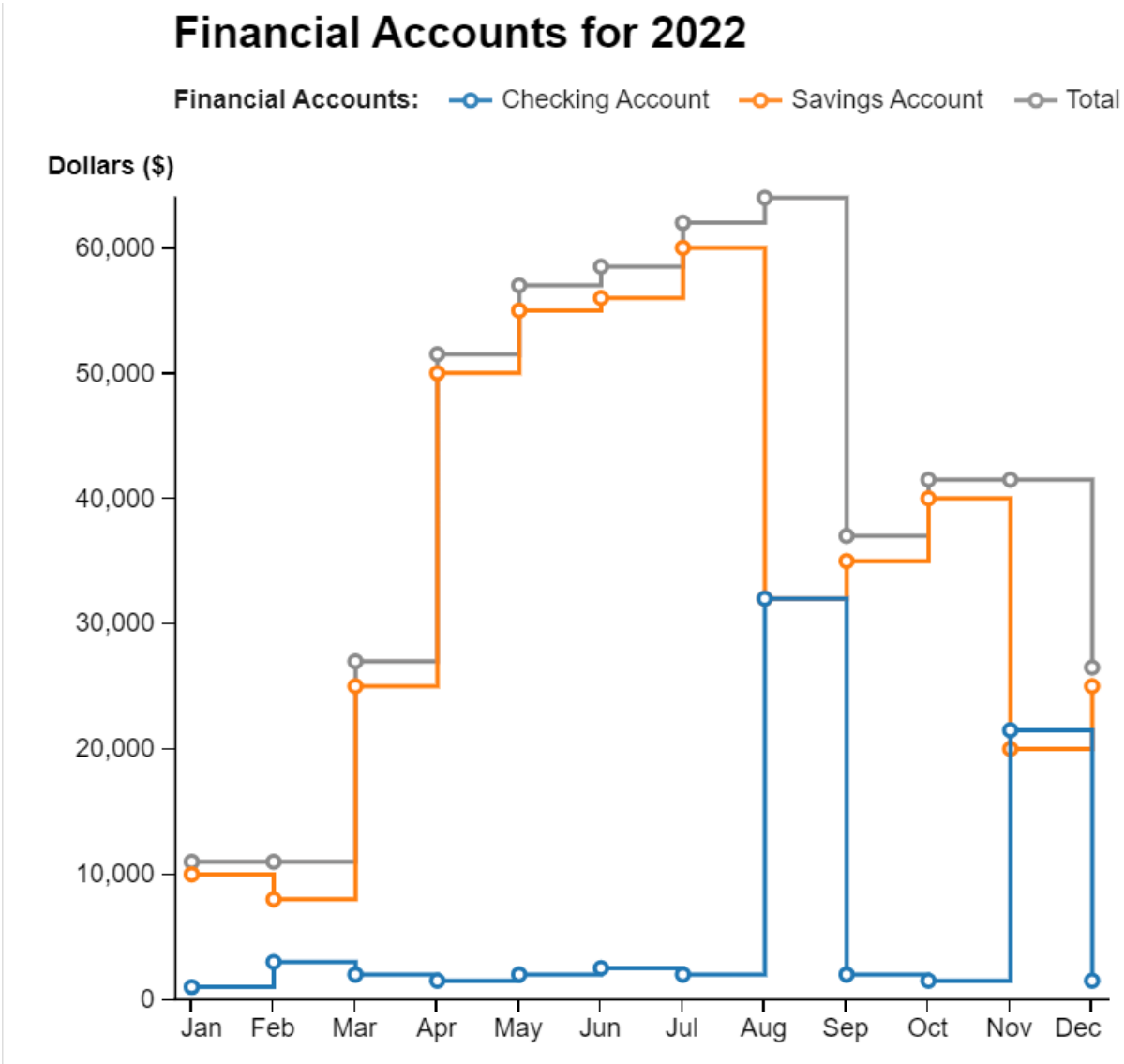
Step

Use Step charts to:

- Track changes over time for one or more groups (similar to a Line chart).
- Display values that change instantly or immediately. For example, a bank deposit is either there or it is not there.

They differ from a Line chart in that the line forms a series of steps between the data points, and there is never an intermediate value.

This example shows how the checking and savings accounts change by month. Click the **Run Example** button below the Step chart to see it in Cyberquery.



(src: query_sources/ccv9/intro_step_chart_example_01.eq)

Combination

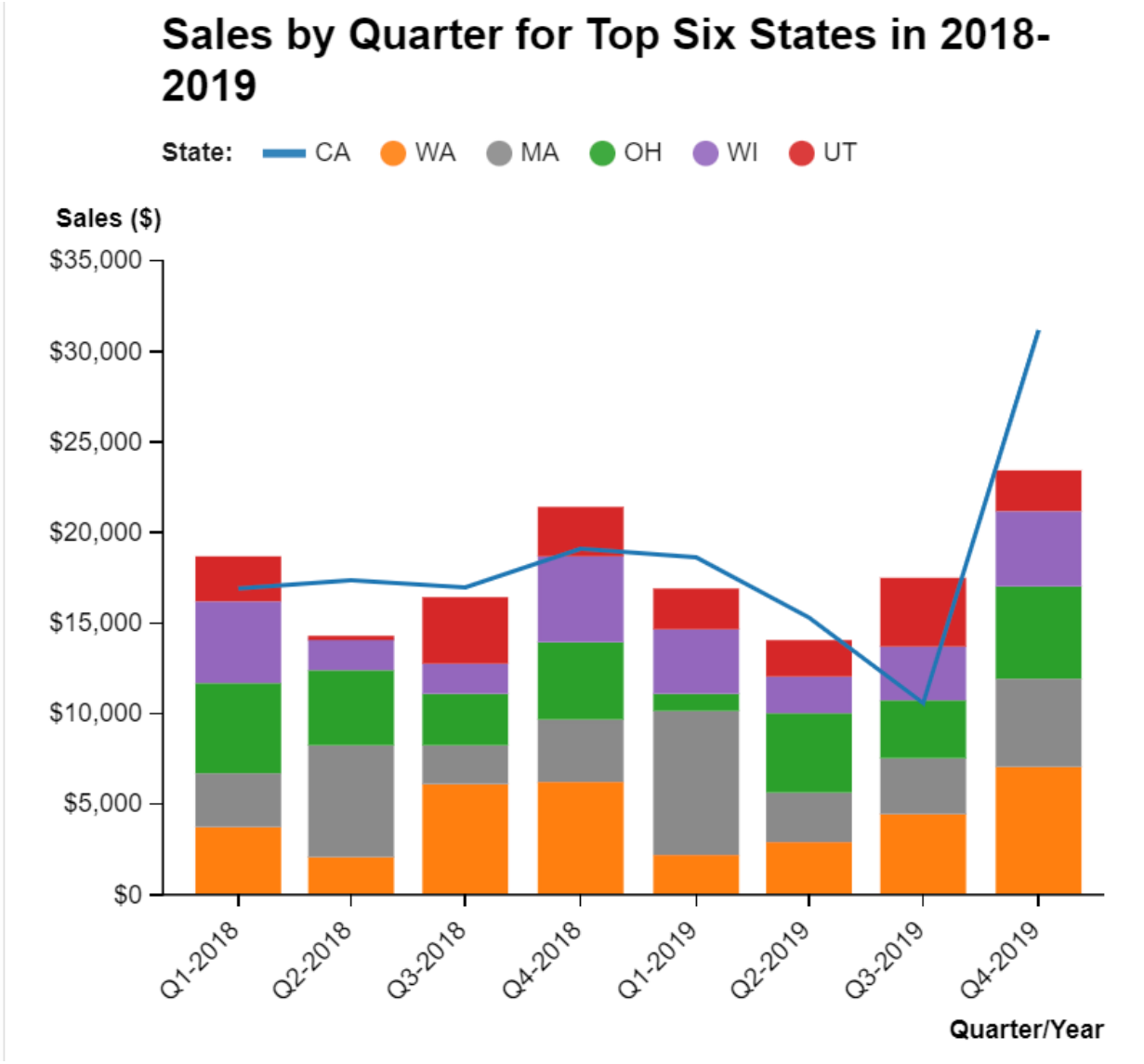
Use a Combination chart to:

- combine two or more chart types in one chart.
- emphasize one data item in your chart.

You have the option to use Bar, Line, Area, and Step charts in Combination charts.

The first example shows how the state with the most sales (CA) compares to the next five states (WA, MA, OH, WI, UT) in sales. Click the **Run Example** button below the first Combination chart to see it in Cyberquery.

The second example shows how the total sales (red line/Y-axis 1) compares to total weight (blue bars/Y-axis 2) by month for 2019. Click the **Run Example** button below the second Combination chart to see it in Cyberquery.



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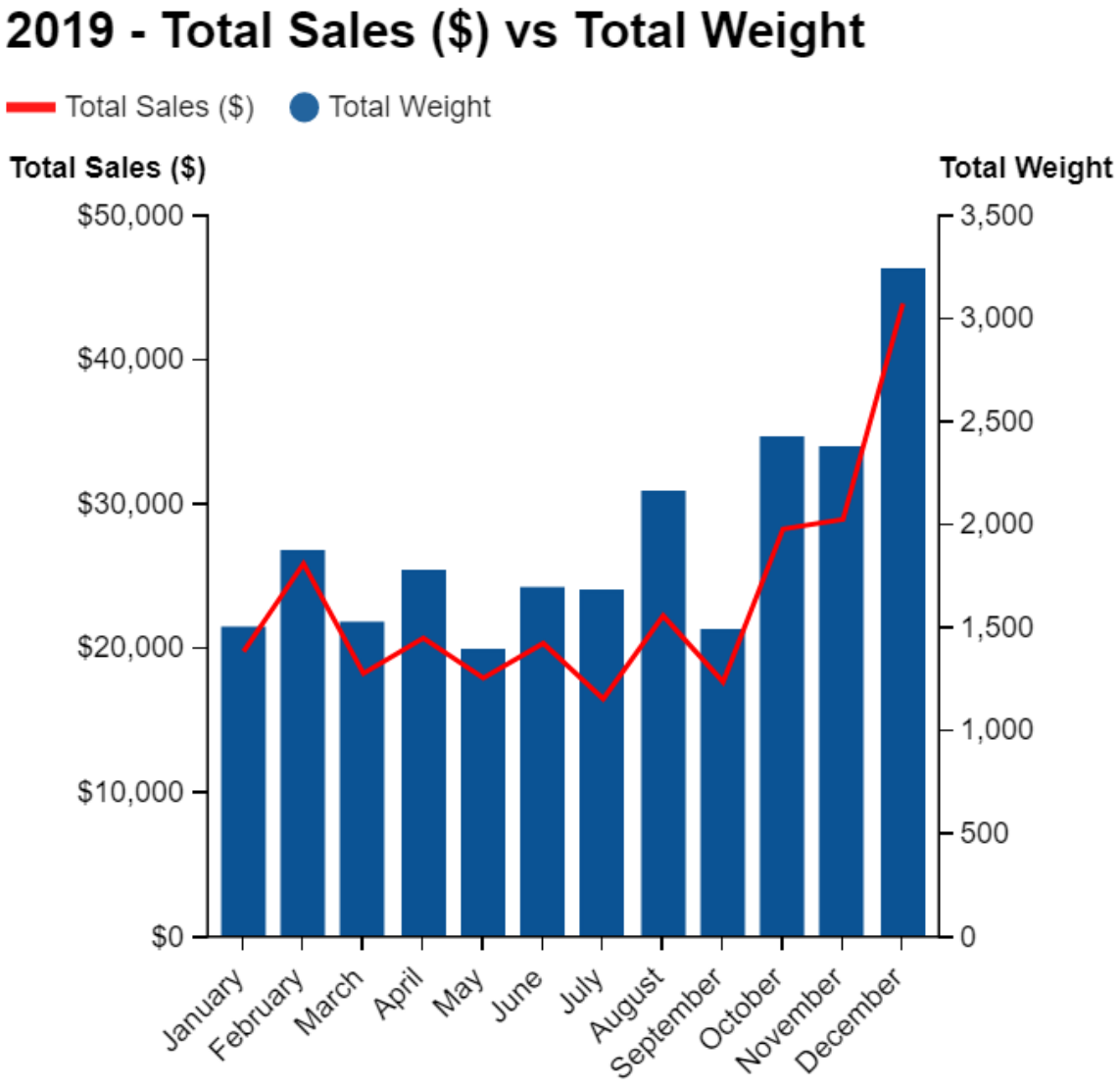

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