

salesforce

WORKFORCE NAVIGATORS

An E-Access Guide to Chart Types



by Cala Estes Campfield



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by Cala Estes Campfield - Salesforce Workforce Navigators

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Understanding This Guide

This guide is designed to provide a better understanding of how charts look for people who have trouble accessing visual images.

To learn about building reports and dashboards, data analytics in Salesforce, or how to create charts, check out Trailhead, our free learning website.

The tactile images contained in this book have been simplified to conserve space. Axis labels are included for each chart, but details such as color coding and legends may be omitted.

The purpose of this guide is to demonstrate the general shape of various chart types so you can understand how data is represented by various charts used within Salesforce. We won't discuss which chart types are best for various use cases here or dive deeply into explanations of measurement.

You should be familiar with basic Salesforce terminology to get the most understanding out of this guide.

What are Charts?

Charts are a visual way to represent data in an easily readable, quickly understandable format. It may take someone several minutes to read a text-based data table and understand the analysis, but charts provide a quick graphical snapshot that can be understood at a glance.

Charts come in many shapes and types. They can represent data in various visual formats. The same set of data can be shown in several types of charts.

You will encounter charts frequently in Salesforce. They are a popular means for representing and understanding data for those who can see them.

Many charts have an X-axis running horizontally along the bottom of the chart and a Y-axis running vertically up the left-hand side. This orientation is flipped in horizontal bar charts. Each axis measures some kind of data reference. The smaller values are usually on the left side of the X-axis and the bottom of the Y-axis.

Charts in Salesforce

You will find charts throughout the Salesforce interface. Here are some places you might spot charts:

List Views - The records shown in a list view can be summarized in a chart. A limited number of charts are available in this interface.

Reports - Summary and matrix reports have the ability to display charts. A report must have at least one grouping in order to display a chart. There are several chart types available for use on reports.

Dashboards - These are comprised of several charts also called dashboard components grouped together on one page. Each chart has a single source report generating the data. You can use the same source report to display different dashboard components. The dashboard component can display a totally different chart from what is shown on its source report, and the dashboard builder has more available chart types than the report builder.

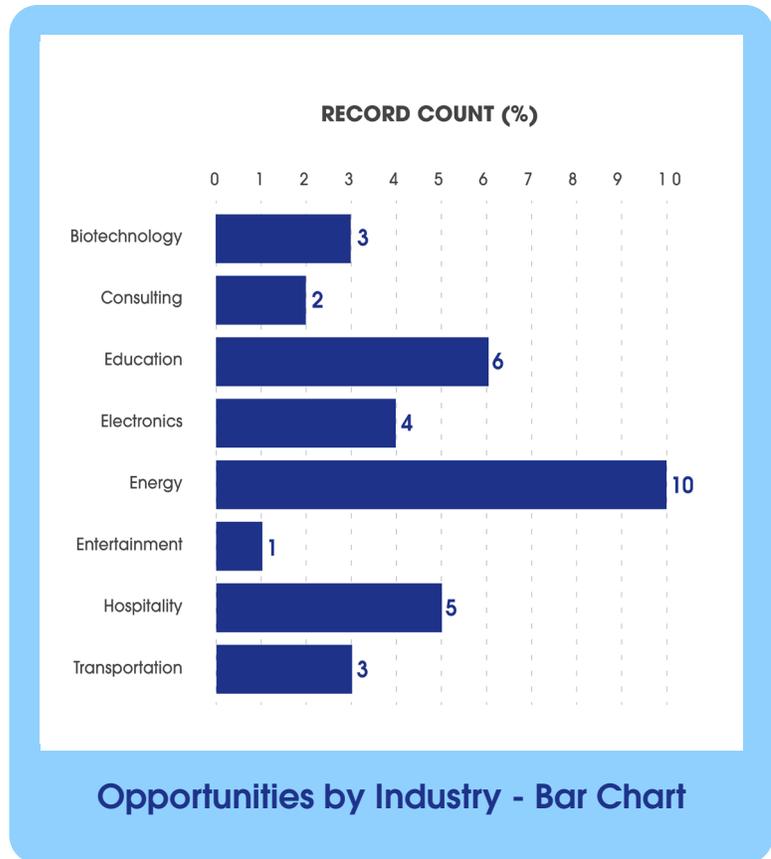
Record Pages - It may be useful to display a report chart right on an object's record page. The page can be edited to show charts from summary or matrix reports which have charts added to them.

Bar Charts

Bar charts, also called horizontal bar charts, show rows of bars running left to right across the page. Each bar represents a grouping of data. These charts have an X-axis running vertically up the left-hand side and a Y-axis running horizontally flat along the chart. The bars are left-aligned along the X-axis, and each bar extends to the right. The length of each bar depends upon its measure along the Y-axis.

The following chart is called Opportunities by Industry. It measures industry type along the vertical Y-axis and record count along the horizontal X-axis.

Each bar represents one industry like Education or Technology. There are 8 bars for 8 industries. This chart shows how many opportunity records are in each industry.

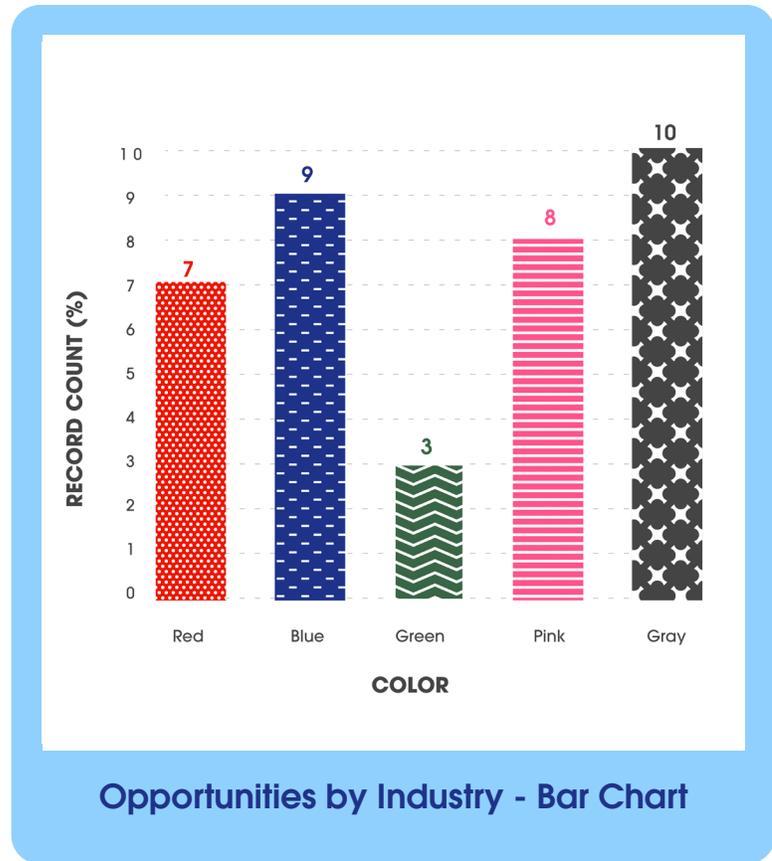


Vertical Bar Charts

Vertical bar charts, also called column charts, show bars standing vertically and rising up the page. Each column represents a grouping of data. These charts have an X-axis running horizontally along the bottom, and a Y-axis running vertically up the left-hand side. The columns are aligned along the horizontal X-axis. The height of each column depends upon its measure along the Y-axis.

The following chart is called Opportunities by Color. It measures color along the horizontal X-axis and record count along the vertical Y-axis.

Each column represents one color of jacket being sold. There are 5 columns for 5 colors. This chart shows how many opportunity records exist for each of the 5 available colors.



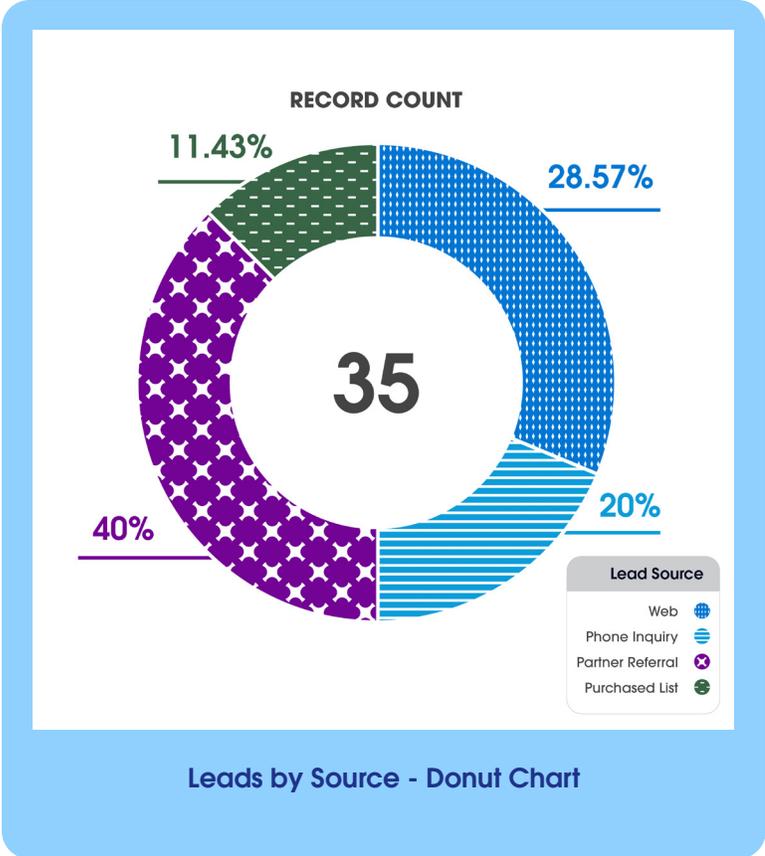
Donut Charts

Donut charts show a circle which is sliced into sections. The middle of the circle may be removed entirely or else used to display the total. Therefore, the slices aren't triangles, rather, they are segmented arcs around the perimeter of the circle.

Each slice represents a grouping of data. These charts do not have an X-axis or a Y-axis. Instead, each slice represents a percentage out of the whole and each one will be larger or smaller depending on the measure of the grouped data.

The following chart is called Leads by Source. It measures how many lead records came in from various sources.

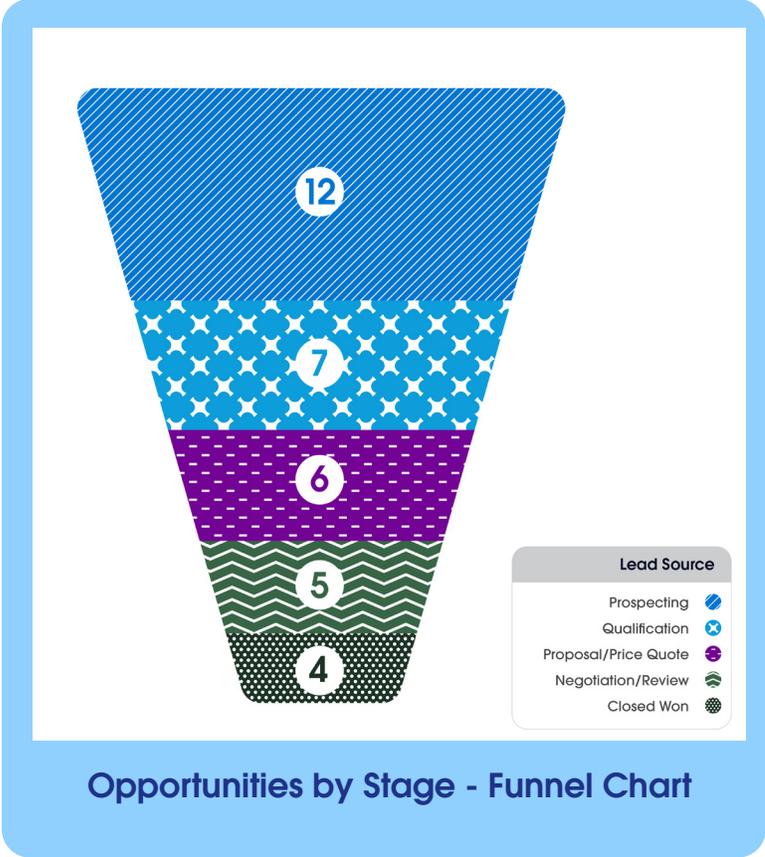
Each slice represents one lead source like web, phone inquiry, or partner referral. There are 4 slices in the donut for 4 lead sources. This chart shows how many lead records exist for each of the 4 lead sources.



Funnel Charts

Funnel charts appear like an inverted triangle with the smallest section on the bottom. They typically are made up of rows of bars centered atop one another. Each row represents a grouping of data.

The following chart is called Opportunities by Stage. It measures how many opportunity records are in each stage of the sales pipeline. Each row of the funnel represents one sales stage. There are 5 rows for 5 stages. The stages have been sorted into their chronological order with Prospecting at the top and Closed Won at the bottom.

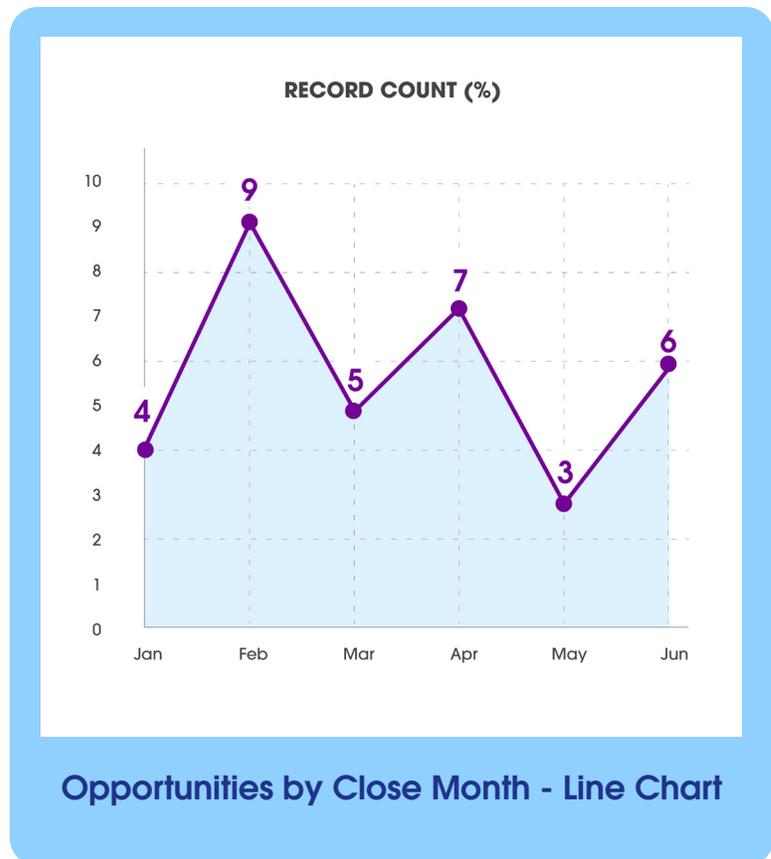


In this example, the top row of the funnel has the largest record count with each row below having smaller counts. This isn't always the case with funnel charts. They keep their shape even if the values on each row are not in descending order. This is because funnel charts are designed to show progression through an ordered flow or pipeline.

Line Charts

Line charts show a single unbroken line running from left to right across the page. The line zig-zags up and down as it moves across the chart. In general, line charts are used to measure data trends over time, with time typically measured on the X-axis.

These charts have an X-axis running horizontally along the bottom, and a Y-axis running vertically up the left-hand side. The line moves up and down depending on an increase or decrease in the value of the data being measured on the Y-axis as time continues along the X-axis.



The following chart is called Opportunities by Close Month. It measures opportunity close date grouped by month along the horizontal X-axis and record count along the vertical Y-axis.

On the X-axis, there is a point for January in the bottom left corner. Points move right at equal intervals for six months with June located on the right-hand side of the X-axis. The measurement line goes higher in months where more opportunities are scheduled to close and drops down in months where fewer opportunities will be closing.

Scatter Charts

Scatter charts or scatter plots consist of several dots, each one representing the intersection between two numerical variables. These charts show whether or not a relationship exists between the variables. They can't say for certain that one variable causes a change in the other, but they can show a trending relationship between them.

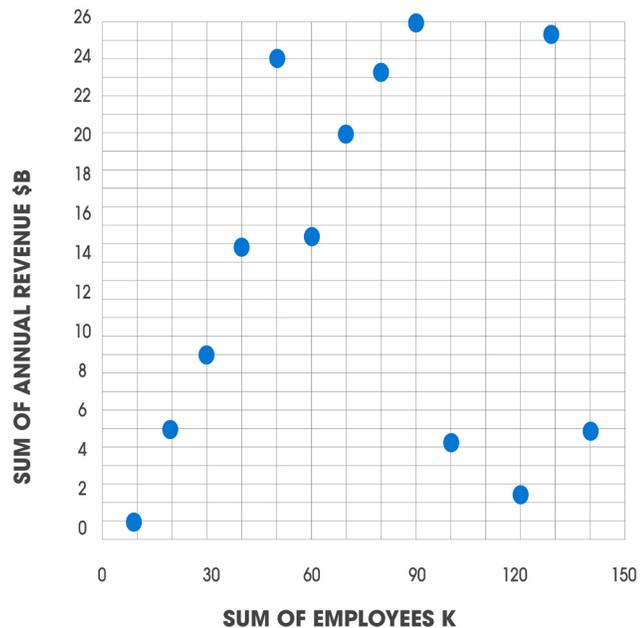
The variables in a scatter chart must be numerical because these charts measure quantity. Scatter charts measure relationships between numerical data sets.

These charts have an X-axis running horizontally along the bottom, and a Y-axis running vertically up the left-hand side. If the points are randomly scattered across the chart with no clustering, the two variables show no trending relationship. If the points cluster together into a line sloping up or down across the chart, then the two variables may have a positive or negative relationship. This pattern of clustered points is called the trend line. The stronger the relationship is between the two variables, the more solid the line of dots will appear.

If there is a defined cluster of dots moving from bottom left to top right across the chart, this indicates a positive relationship. As one variable increases, so does the other. If the dots show a defined pattern moving from top left to bottom right, this indicates a negative relationship. As one variable increases, the other decreases. The relationship between the variables is called a correlation.

The following chart is called Accounts by Employees vs Annual Revenue. It measures a company's number of employees on the horizontal X-axis and a company's annual revenue on the vertical Y-axis. Each point on the scatter chart represents one company.

The chart shows whether or not there is a relationship between the number of employees at a company and the company's revenue for the year. Do companies with more employees make more money?

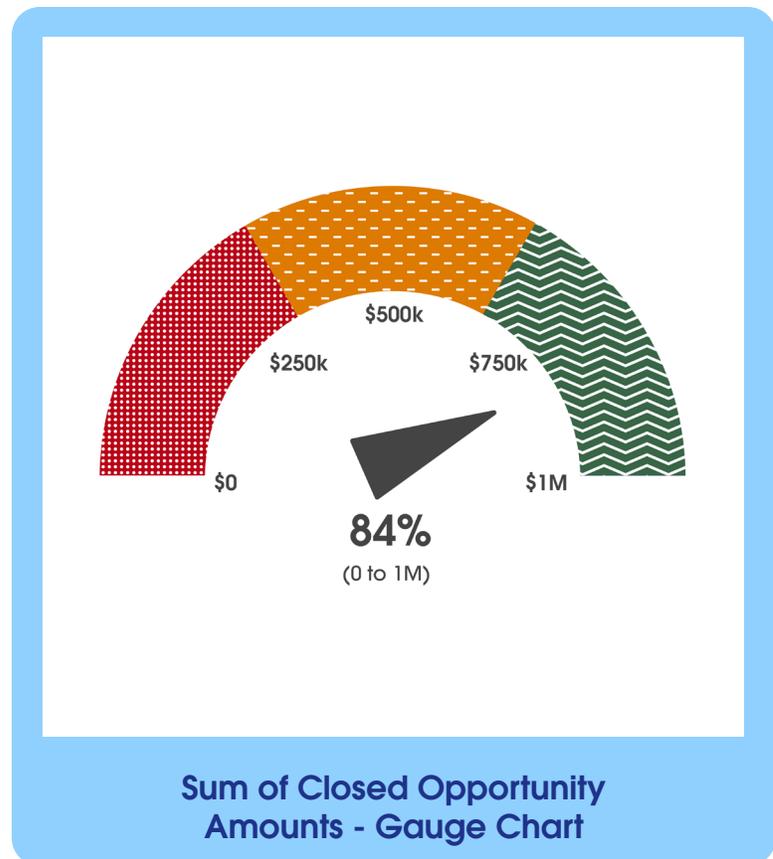


Accounts by Employees vs Annual Revenue - Scatter Chart

Gauge Charts

Gauge charts show a narrow band arcing in a half circle from left to right. These charts measure progress toward a numerical goal. The domed top of the chart shows a small number on the left side growing larger as the chart arches upward and descends. The right corner of the chart displays the largest value being measured, such as a target or goal number.

Gauge charts include a needle pointing to the current measure of the data point. This feature shows how close the data is to meeting a target number. These charts may also be divided into segments and color coded to emphasize progress toward the goal.



The following chart is called Sum of Closed Opportunity Amounts. It measures the sum of all amounts on closed - won opportunities for the current year with a goal of \$1,000,000. The chart has been divided into three equal sections. The left section goes from \$0 to \$300,000 and is red. The middle section ranges between \$300,000 and \$600,000. It is yellow. The right-hand section closest to the goal ranges between \$600,000 and \$1,000,000. It is green. The gauge needle is currently pointing to \$840,000.

Dividing the chart into sections and adding color to each one helps the reader quickly understand how much progress has been made toward the target value. For example, if the needle is pointing inside the right-hand section, we can easily see that we're over 66% or 2/3 of the way towards our target. These sections can be filled in with any color, though red, yellow, and green tend to have a universal meaning of "low," "medium," and "high."

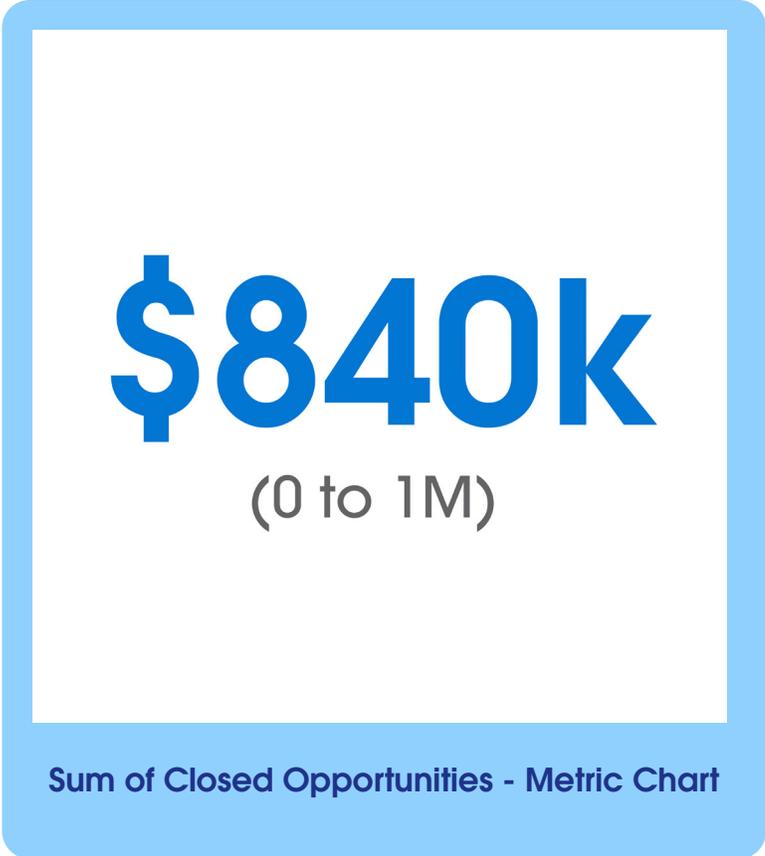
Metric Charts

Metric charts are very simple. These charts show a number represented by the data being measured. They are simply used to display a numerical figure, such as average rainfall this year or total revenue from all opportunities. There is no X-axis or Y-axis and no graph. The number is the only feature of the chart.

This chart can be configured to also show a numerical range below the metric figure. For example, if a company has a target revenue, two numbers can be displayed below the data value to indicate a range like \$0 to \$1,000,000.

The following chart is called Sum of Closed Opportunities. It measures the sum of amounts on all closed-Won opportunities for the current calendar year.

A range has been added to show a goal of \$1,000,000.



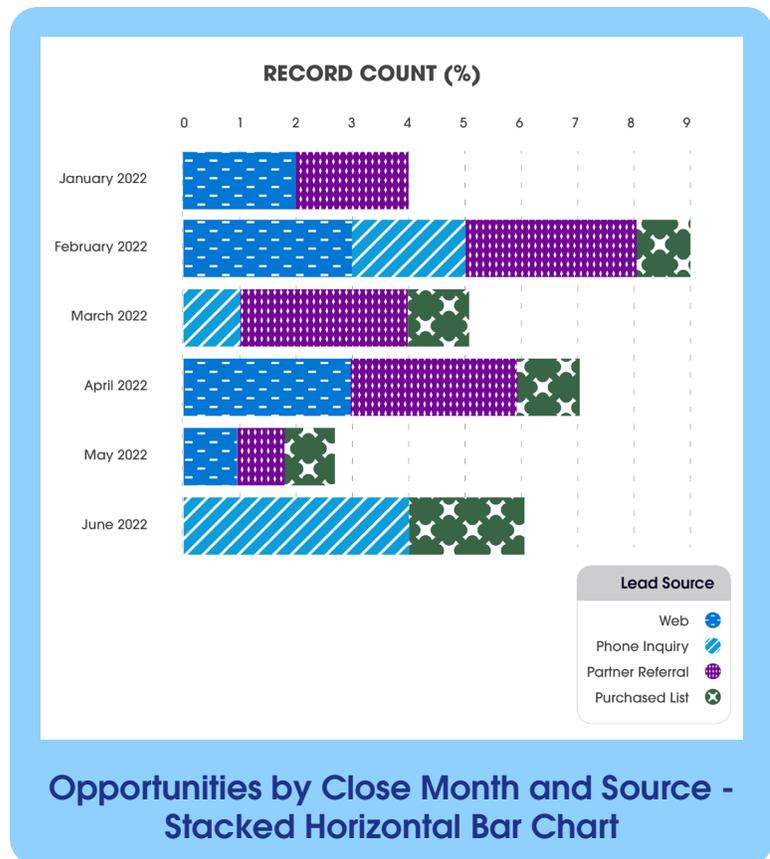
\$840k
(0 to 1M)

Sum of Closed Opportunities - Metric Chart

Stacked Horizontal Bar Charts

Stacked bar charts are horizontal bar charts that show rows of bars running left to right across the page. Each bar represents a grouping of data.

Stacked bar charts go one step further than regular bar charts and measure a second grouping of data on each bar. Each bar is divided into segments or slices represented by the second grouping. This chart type measures how data within the second grouping stacks up as a percentage out of the whole bar.



Opportunities by Close Month and Source - Stacked Horizontal Bar Chart

The following chart is called Opportunities by Close Month and Source. It measures close month along the vertical X-axis and record count along the horizontal Y-axis. Each bar is divided by lead source.

Each bar represents one month from January to June. This chart shows how many opportunity records are scheduled to close in each month. The divisions in each bar show how many of those records in each month came from various lead sources like web or phone inquiries.

These charts can be tricky to read. In this chart, 4 records will close in January. 2 records have web as a lead source, and 2 have partner referral. The January bar is sliced in half down the middle with a left half and a right half. The Web half of the bar goes from 0 to 2 on the Y-axis for record count. Partner Referral starts at 2 and ends at 4. For these charts, it is necessary to do a bit of math to interpret how the stacked group contributes to the whole bar.

Stacked Vertical Bar Charts

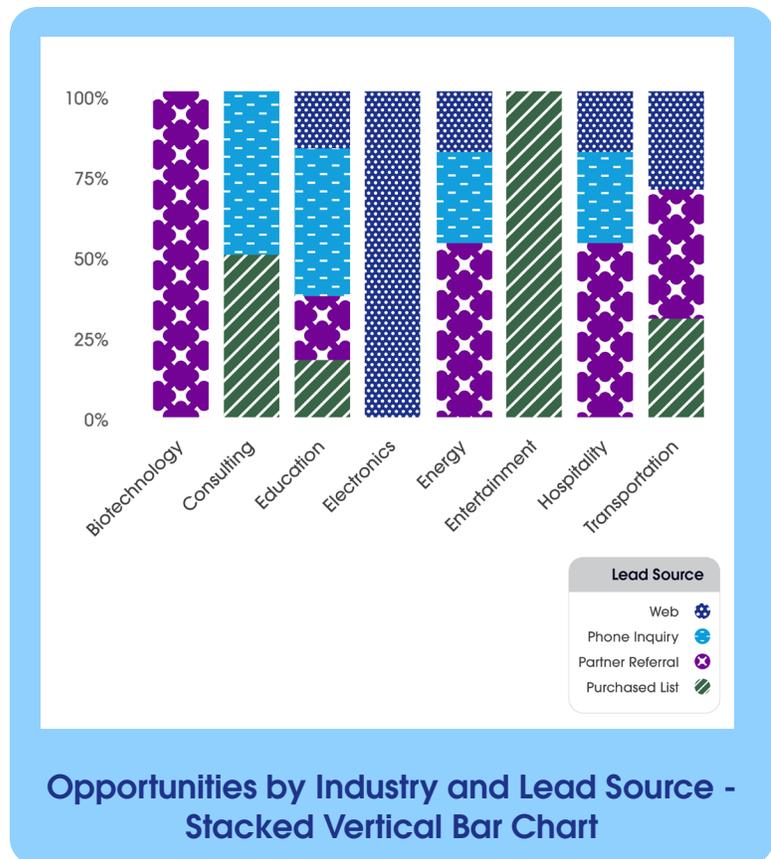
Stacked vertical bar charts are column charts or vertical bar charts that show columns running vertically up the page. Each bar represents a grouping of data.

Stacked bar charts go one step further and measure a second grouping of data. Each column is divided into segments or slices represented by the second grouping. This chart type measures how the data within the second grouping stacks up as a percentage out of the whole column.

The following chart is called Opportunities by Industry and Source. It measures industry type along the horizontal X-axis and record count along the vertical Y-axis. Each column is divided by lead source.

Each column represents one industry type like energy or education. This chart shows how many opportunity records exist for each industry type and also how many of those records in each industry came from various lead sources like web or phone inquiries.

These charts can be tricky to read. In this chart, 2 records are in the Consulting industry. 1 record has Phone Inquiry as a lead source, and the other has Purchased List. The Consulting column is sliced in half across its middle. The Phone Inquiry half of the column rises from 0 to 1 on the Y-axis for record count. Purchased List starts at 1 and ends at 2. For these charts, it is necessary to do a bit of math to interpret how the stacked group contributes to the whole column.



Opportunities by Industry and Lead Source - Stacked Vertical Bar Chart

In Conclusion

Charts are nuanced representations of data, and this guide is merely a primer on the subject. There are numerous websites with deep dive guides into best use cases and detailed explanations of chart types. For example, the same set of data could be shown on a metric chart or a gauge chart. The best chart to use depends on what question the data is answering and how that can most accurately be represented in your design. There are even best practices for accessibility when designing the visual appearance of charts. We encourage you to do further research into charts for a more complete understanding of their flexibility and scope.

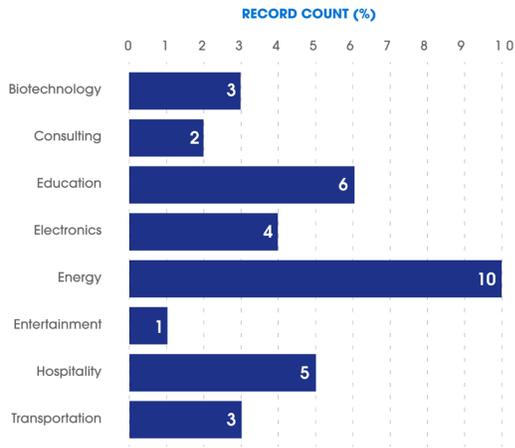
We hope that this guide has provided a clearer understanding of how charts look so you can take your data analysis skills to the next level. Whatever your role is within the Salesforce economy, the Workforce Navigators program is here to support accessibility and inclusion along the way.

Stay in the loop on all things accessibility at Salesforce. Learn more about our programs on the Salesforce Office of Accessibility website www.salesforce.com/accessibility

About the Author

Cala Estes Campfield is a Technical Writer of Accessibility Content on the Workforce Navigators team within the Salesforce Office of Accessibility. She is a certified Salesforce Administrator with experience teaching the Salesforce platform to students across the world. She is both a Certified Professional in Accessibility Core Competencies and a certified Accessible Document Specialist through the International Association of Accessibility Professionals (IAAP). She holds certifications in both the JAWS and NVDA screen readers, and is dedicated to sharing her knowledge of assistive technology with Trailblazers throughout the Salesforce ecosystem. All illustrations in this book were created by the author using Salesforce accessibility features embedded into reports and dashboards.

Endnotes



Bar Chart

This image is a horizontal bar chart showing what percentage of opportunity records fall into each industry.

The chart presents as a collection of left-aligned horizontal rectangular bars laid out along a vertical axis, each representing a different category. The bars are uniformly colored in a shade of dark blue and extend to the right with varying lengths.

Along the horizontal top axis, there are dotted lines that correspond to percentages, ranging from 0 to 10, with increments of 1. Each category has a bar that extends horizontally from the vertical axis to a specific point on the horizontal axis, indicating the percentage value. On the end of each bar, the exact percentage is denoted with a number in blue text, clearly indicating the record count for each category.

The labeled data on the vertical axis are the names of industries, and the horizontal axis represents the record count in percentages.

Here are the specific percentages next to each industry bar listed top to bottom:

Biotechnology: 3%

Consulting: 2%

Education: 6%

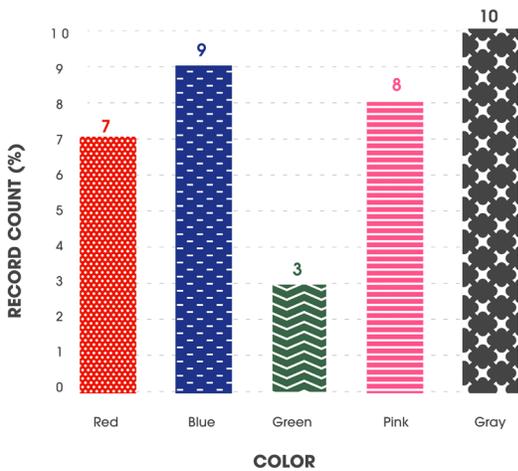
Electronics: 4%

Energy: 10%

Entertainment: 1%

Hospitality: 5%

Transportation: 3%



Vertical Bar Chart

This image is a vertical bar chart showing what percentage of opportunity records fall into each color category.

The chart consists of five vertical bars of varying heights, standing on a horizontal axis, similar to a city skyline with buildings of different heights. Each bar is a distinct color and represents a separate category. From left to right, the colors and corresponding categories are: a deep red, a navy blue, a vibrant green, a light pink, and a dark gray. Each bar has a label of the same color as the bar at the base on the horizontal axis, and the labels are as follows: Red, Blue, Green, Pink, and Gray.

Each bar has a distinct pattern to aid in non-color visual identification: the red bar is filled with small white polka dots, the blue bar has white horizontal stripes, the green bar is patterned with white chevrons pointing upwards, the pink bar has white vertical stripes, and the gray bar is speckled with white stars.

The vertical axis on the left side of the chart is labeled with percentages, ranging from 0 at the bottom to 10 at the top, with horizontal dotted lines intersecting the bars at each whole number to aid in visually estimating their heights. Each bar's height correlates to a number on this axis, representing the percentage for its category. At the top of each bar, there's a number indicating the specific percentage. Each number matches the color of its bar. The labeled category along the bottom horizontal axis is "COLOR," clearly denoting that each bar represents a different color.

Here are the labeled percentages for each colored bar:

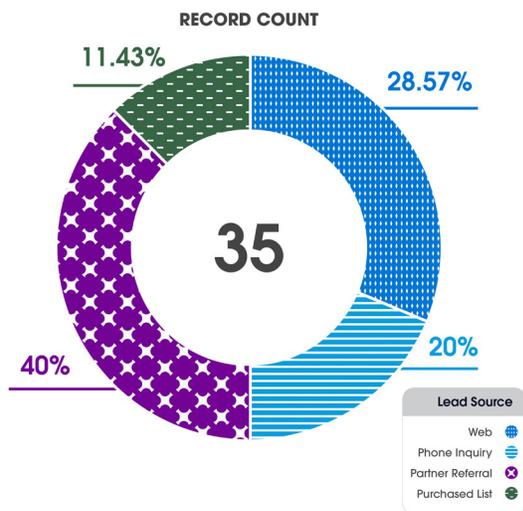
Red bar: 7%

Blue bar: 9%

Green bar: 3%

Pink bar: 8%

Gray bar: 10%



Donut Chart

This image is a donut chart showing the percentage of lead records that came in from various sources.

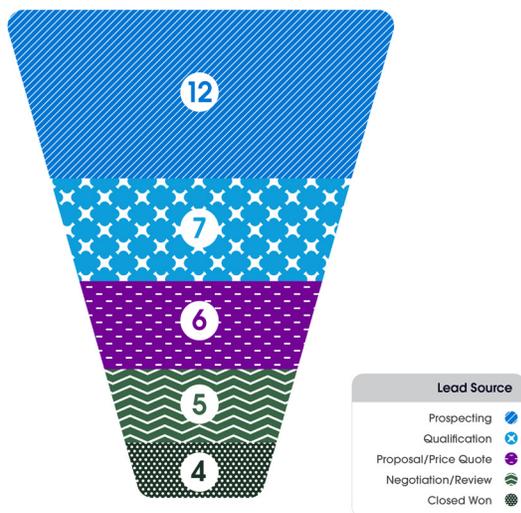
The chart is shaped like a ring or donut with a hollow center. It is segmented into four differently patterned and colored slices, each representing a portion of the total record count.

Viewed from above, the chart appears like a doughnut or bagel with each section frosted differently. The segments are separated by thin white lines to help visually separate the sections.

Each section represents a lead source like web, phone inquiry, partner referral, or purchased list.

The labeled data categories and the chart legend include percentages for each segment of the donut: Web is represented by a blue segment with a white grid pattern, making up 28.57%; Phone Inquiry is indicated by a green segment with white diagonal lines, comprising 11.43%; Partner Referral is a purple segment filled with white stars, accounting for 40%; and Purchased List is shown as a light blue segment with horizontal stripes, forming 20%. In the center of the donut is the number "35," which indicates the total number of records.

The legend, located at the bottom right, correlates the patterns of the segments to their respective lead sources, with matching graphical patterns next to the text labels.



Funnel Chart

This image is a funnel chart depicting the number of records in various stages of a process.

The chart has the shape of an inverted triangle or funnel, reminiscent of a filter through which elements pass from the wide top to a narrow bottom. It's divided horizontally into five segments, each with a different pattern and color, representing a stage in a sales or lead generation process.

The labeled data categories and the chart legend include numbers and stages for each segment of the funnel:

The top segment is light blue with horizontal stripes labeled with the number 12 for Prospecting

The next is a teal segment with white stars labeled 7 for Qualification

Moving down, the next is a purple segment with horizontal dashes labeled 6 for Proposal/Price Quote

Next is a green segment with chevron patterns labeled 5 for Negotiation/Review

At the bottom is a dark gray segment with polka dots labeled 4 for Closed Won.

The legend, floating to the right of the funnel, uses symbols to correlate the patterns of the segments to their respective stages in the sales process.

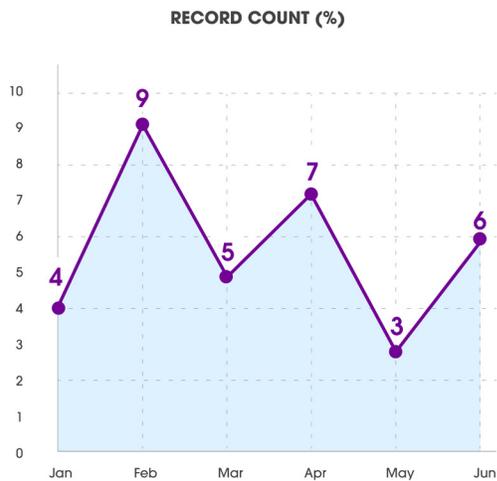
This image is a line chart showing how many opportunity records closed in the first half of the year.

The chart shows a line that moves up and down across the chart, connecting a series of points plotted against a grid. The line could be likened to the peaks and valleys of a mountain range, with each point representing the record count percentage for a particular month. The line and points are a deep purple color. The background of the chart is light blue below the line and white above it.

The horizontal axis at the bottom is labeled with the months, from January on the left to June on the right, marking the timeframe of the data. The vertical axis on the left is labeled with percentages from 0 to 10 in increments of 1, establishing the scale for the record count.

Each data point on the graph is a purple dot placed at the intersection of a month on the x-axis and a percentage on the y-axis, with the exact percentage noted above the dot. The sequence of data points starts in January with 4%, peaks in February at 9%, drops to 5% in March, rises to 7% in April, plunges to 3% in May, and climbs again to 6% in June.

The chart serves to present the record count percentages over the first half of the year, with each point connected by the line, offering a simple visualization of the data's movement over time.



Line Chart

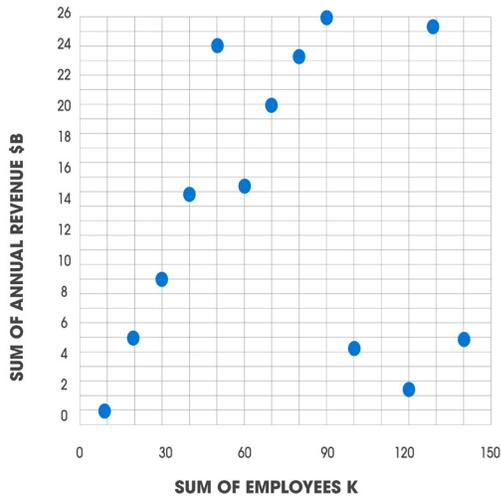
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Scatter Chart

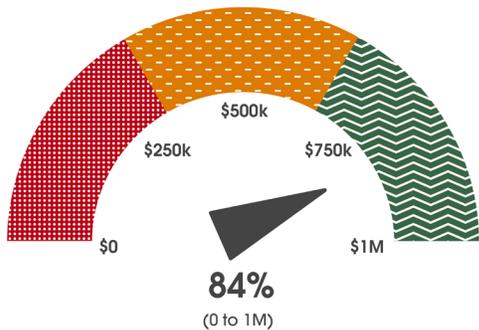
This image is a scatter plot titled “SUM OF ANNUAL REVENUES \$B.”

The chart displays a collection of individual data points scattered across a grid. Each data point is a dark blue dot, similar to looking at a night sky and seeing stars at various positions; each star’s position might represent a different value in a vast celestial map. The distribution of the points are positioned where the values of two variables meet on the chart.

The bottom horizontal axis, labeled “SUM OF EMPLOYEES K,” suggests that it represents a sum of employees in the thousands. This axis ranges from 0 to 150, marked at regular intervals. The vertical axis, labeled “SUM OF ANNUAL REVENUES \$B,” suggests it represents the sum of annual revenues in billions of dollars. It extends from 0 to 26, with horizontal lines intersecting the entire chart at regular intervals, which helps to determine the vertical position of each dot.

On the lower left section of the chart, a few dots form a line sloping up to the right. This trend continues for approximately half of the chart. As both the revenue and employee numbers increase, the dots in the right half of the chart appear relatively dispersed, breaking off the trend line.

This pattern suggests that the annual revenue does increase along with the number of employees to a point, but at larger revenues and employee numbers, the scattered dots show no trending relationship.



Gauge Chart

This image is a gauge chart showing the total current revenue of opportunity records measured against a goal.

The chart is shaped like a semi-circular arc, resembling a dashboard speedometer. It is divided into three segments, each with a distinct pattern and color, representing different ranges of monetary values. Starting from the left, the first third of the arc is a bright red with a small white dot pattern, spanning from \$0 to \$250k. The next half of the arc is an orange color with a larger white dot pattern, covering \$250k to \$750k. The final quarter is a green segment with a white chevron pattern, extending from \$750k to \$1 million. These colors symbolize a gradation of measures like a traffic light: red indicating a lower range, orange a middle range, and green the higher range.

There's a gray needle pointing into the green area, suggesting a measure that falls within this segment. Just below the needle, in the center of the chart, "84%" is written in bold, dark text, indicating the current value. Underneath this percentage is a parenthetical note "(0 to 1M)," which denotes the scale or full range of the gauge.

Each color segment has a monetary value labeled along the curved edge of the gauge. "\$0" is at the beginning of the red segment on the left side. At the far right end of the green segment, "\$1M" indicates the maximum value of the scale.

The chart does not have traditional x and y axes but rather uses the arc to represent a scale of values from 0 to 1 million dollars with the needle pointing to a point along the arc, indicating the current status or measurement against this scale.

\$840k
(0 to 1M)

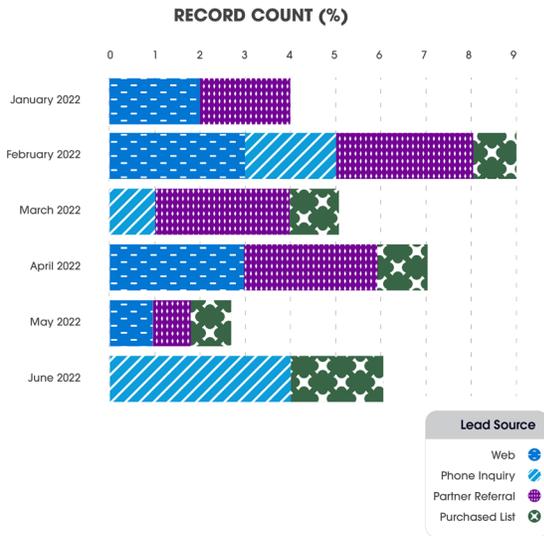
Numerical Chart

This image displays a monetary value metric.

The image consists of a large, bold dollar amount in a bright blue color. The dollar amount reads “\$840K,” representing a financial figure in the thousands.

Below the prominent dollar figure, in smaller text and within parentheses, is the range “(0 to 1M).” This range indicates that the value presented is part of a scale that starts at \$0 and goes up to \$1 million.

There is no chart shape or graph elements like axes or bars; it is a simple, straightforward display of a numeric value. This type of display might be used to quickly convey a key data point, such as a performance metric or a financial goal.



Stacked Horizontal Chart

This image is a stacked horizontal bar chart showing how many records came in during each month from various lead sources.

This chart resembles a regular horizontal bar chart with rectangular bars extending to the right at different lengths. Each bar is chopped into sections of different sizes. Each bar is sliced into multiple segments, each of a different size.

The visual description of this chart is like a garden plot viewed from above, where each row represents a month, and the patterned segments are different types of crops, each with a distinctive appearance that occupies a portion of the row.

The chart comprises a series of horizontal bars, one for each month from January 2022 to June 2022, stacked on top of each other aligned along a left vertical axis. Each bar is a different length showing how many total records came in for that month.

The months are listed along the vertical axis, and record count percentage is listed along the top horizontal axis.

Each bar is broken into segments by different lead sources. The segments within each bar are color-coded to differentiate between the lead sources.

The color coding in the bars corresponds to four lead sources: Web, Phone Inquiry, Partner Referral, and Purchased List.

The categories, as indicated in the legend at the bottom of the chart, are:

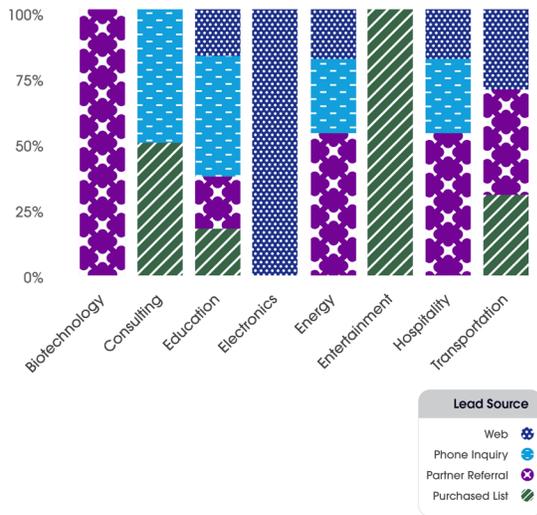
“Web” (blue with horizontal dashes)

“Phone Inquiry” (blue with diagonal white stripes)

“Partner Referral” (purple with polka dots)

“Purchased List” (green with star patterns).

The significance of the color coding is crucial for understanding the composition of the record count. It allows the viewer to see not just the total percentage of records for each month but also how much each lead source contributes to that total.



Stacked Vertical Chart

This image is a stacked vertical bar chart showing how many records came in across industry categories from various lead sources.

This chart resembles a regular vertical bar chart, but these bars all rise to the same height at 100%. Each bar is chopped into sections of different sizes like floors of buildings grouped into sections.

The chart consists of vertical bars representing a different industry sector such as Biotechnology, Consulting, Education, Electronics, Energy, Entertainment, Hospitality, and Transportation. These bars are aligned side by side along a bottom horizontal axis.

Each segment within the bars is color-coded and patterned to represent a different lead source, as indicated in the legend:

“Web” (blue with polka dots)

“Phone Inquiry” (light blue with horizontal dashes)

“Partner Referral” (purple with a star pattern)

“Purchased List” (green with diagonal stripes).

The segments within each bar stack on top of each other to cumulatively reach the total percentage of the record count for that industry.

The vertical y-axis is labeled with percentages, ranging from 0% to 100%, and each bar’s height reflects the total percentage of the record count for that sector. The x-axis lists the industry sectors.

This color coding is significant because it visually breaks down the record count by lead source within each industry, allowing the viewer to see not only the total percentage for each industry but also the contribution by each lead source type.

