16 Data Visualizations to Thrill Your Customers

insightsoftware

Contents

1 Introduction

Product teams spend countless hours and thousands of dollars to perfect the look and feel of their software applications. But when adding analytics to their products, too many companies breeze over the design process just to get something out the door.

Why add analytics to your product if it fails to increase user satisfaction or boost adoption?

Giving your customers access to analytics isn't enough. Choosing the right data visualizations to convey your datasets is crucial to getting users to adopt your application's analytics.

When done right, data visualizations can present information in a way that's easy to digest and instantly engaging. Data viz has the ability to tell a story through visuals—guiding users toward a conclusion about their data and empowering them to make decisions based on those insights.

You wouldn't write a book without a plot. The same applies to data: Without a story to back it up, your embedded analytics will never get used.

Explore 16 of the most common data visualizations and learn which ones work best with your data in this ebook. Start using visualizations to craft your next great data story.

> ## "People ignore design that ignores people."
> Frank Chimero, Designer & Author

2 Types of Visualizations

Get Inspired to Use One of These Popular Charts and Graphs in Your Next Product Release.

Pie Chart

Best used for showing a one-to-many comparison between the different datasets being represented. It can illustrate relative magnitudes, frequencies, or percentages.

> No surprise: It's named for its resemblance to a pie that's been sliced.
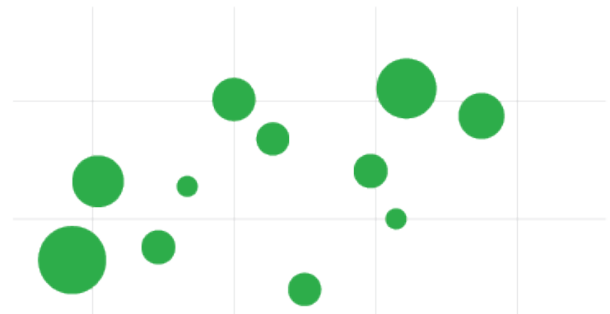
Did You Know?

Alternative visual styles of this include the exploded pie wedge chart, which is used to emphasise important data, and the donut pie chart, which is a pie chart with a hole in the middle, allowing the creator to insert a design element in the center to support the information on display.

Scatter Chart

Best used to display values for two variables from a dataset. The data is displayed as a collection of points. The placement of each point is determined by two variables: one determining the position on the horizontal axis and the other variable determining the position on the vertical axis.

> Scatter charts are great for showing the overall relationship in a large amount of data.

Did You Know?

Scatter charts work best when you have an integer value on both the Y and X axis. Without those values, it will look like a line chart without the line.

Stacked Column & Stacked Bar

Best used for showing the relationship of individual items to the whole – comparing the contribution of each value to a total across categories.

Best Practice:

Use when real estate is limited.

Gauge

Best used to show a range. Great for when you have an absolute floor value and absolute ceiling value and you want to show where a particular value lies within that.
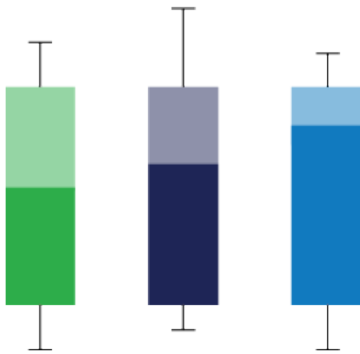

Did You Know?

While some still prefer this visualization (and it's true, it does grab your attention) – gauges are notorious for taking up valuable space and providing limited information since they present data on a single dimension. All a guage really tells the user is whether something is on target, above target, or below target. It's up to you where you want to fall on this great gauge debate.

Whisker Charat or Box Plot

Best used for statistical analysis and to show the distribution of a dataset. The lines that extend vertically from the boxes are known as the whiskers, which denote variability outside the upper and lower quartiles. This type of chart is also referred to as a box and whisker plot.

Bubble Chart

Best used for showing three dimensions of data – comparing entities in terms of their relative values, positions, and their size.
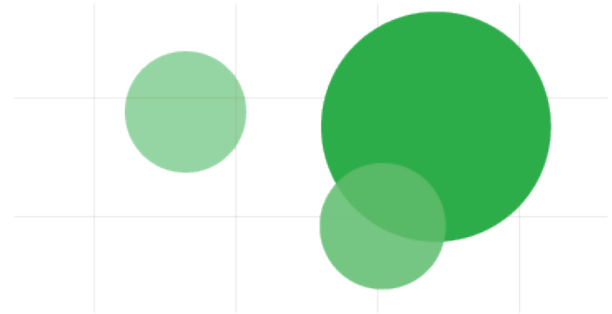
Did You Know?

Bubble charts are similar to a scatter plot, but instead of data points, values are replaced with bubbles.

Polar Chart

Best used for displaying multivariate observations with an arbitrary number of variables in the form of a two dimensional chart.
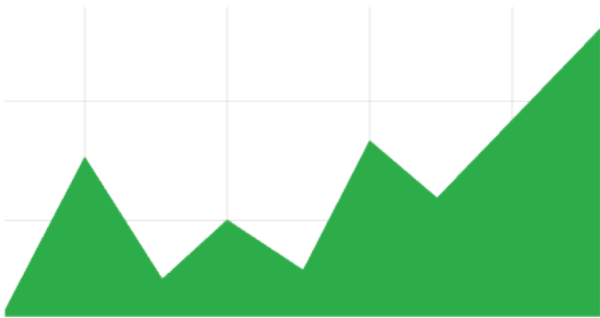
Did You Know?

The Polar Chart is also known as a radar chart, web chart, spider chart, and star chart, among many other names.

Area Chart

Best used for showing cumulated totals using numbers or percentages over time. It's basically a line chart, but filled in to give users a visual to provide a deeper view of the multiple series of data within the chart.

Funnel Chart

Best used for showing stages in a particular process (i.e. sales process) or identifying potential problem areas within an organization's process.

Pyramid Chart

Best used for showing data comparisons, using the thickness of its layers to denote relative values.

Sparkline Chart

Best used for showing many trends at once, as assets of small timelines. Sparkline charts are great for showing variation in a measurement in a simple and condensed way.

Heat Map

Best used for showing geographical representation of data. The individual values are shown as colors.

Did You Know?

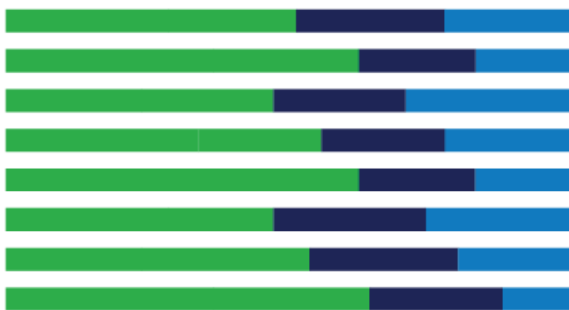A prime example of a sparkline chart is the market summary of the US DOW Jones and S&P 500 stocks.

3 Static vs. Animated Charts

Static Visualizations

Static visualizations provide users with essentially everything you want them to see without requiring them to take any action. Usually, static visualizations display information that doesn't change often.

Animated Visualizations

Animated visualizations provide users with an option to drill deeper into the information being presented, often requiring them to take some sort of action to make it happen. Typically, these types of visuals leverage flash technology or HTML5 to render the data, while static visuals render the data as an image so they don't require any special browser add-ons to be viewed.
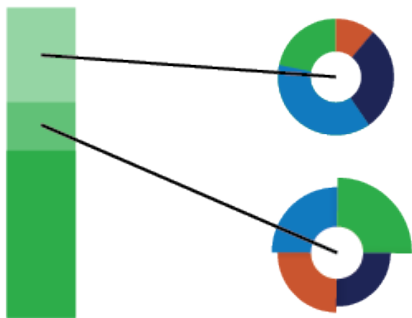
4 Drilldowns and Drillthroughs

Many Users Want to See and Explore the Data in More Depth, Which is Where Drilldowns and Drillthroughs Come Into Play.

Drilldowns

Drilldown is a capability that takes the user from a more general view of the data to a more specific view at the click of a mouse. For example, a report that shows sales revenue by location can allow the user to select a country, click on it, and continue to click to see sales revenue for a specific county, borough, or city within a territory.
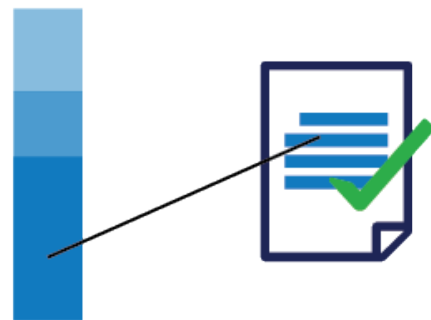

Did You Know?

It's called 'drilldown' because it allows the user to dig deeper into more specific layers of the data or information being analyzed.

Drillthroughs

Drillthroughs take users to a report that is relevant to the data being analyzed (as opposed to showing a more granular level of the data). For example, a tabular report that shows sales revenue by city can allow users to click and reveal an analysis grid of the same data, or perhaps a heat map representing the data in visual form.

> Another way to dig deeper within a visualization is zooming – where clicking shows more detail within a single dataset.

Did You Know?

It's called a 'drillthrough' because it allows the user to pass from one report to another while still analyzing the same set of data.

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Purpose-Built for Software Teams

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