10 practical tips to increase the usability of your reports and dashboards
Abstract

In an age where data is the new oil for growth, the key to solving business problems lies in making data work for us—to present it in a manner that accords meaning, extract insights and help make correct decisions every single time.

Business dashboards and reports are key artifacts that transform raw data into meaningful and actionable information, thus empowering decision makers to make informed choices.
1. Use descriptive captions

The caption of a chart should explicitly describe what the chart is all about. For example, in a marketing heat map chart showing the conversion rate from different marketing mediums, the caption should be – Conversion rates from different marketing mediums.

![Monthly % conversion rates from different marketing mediums](chart.png)

The caption should also mention whether the numbers are in millions and the currency in $. In fact, the captions should be so descriptive that the axis labels if used are only left as reinforcements. However, with so many details put in the caption, they might turn out to be a bit too verbose in some cases. In cases like these, it is a good idea to delegate the units and number scale used to the sub-caption.
2. Arrange the data in order

If the data is name or category-based, and not time-based, it is a good idea to arrange the data in descending/ascending order.
This is particularly helpful when you have a lot of data sets to display on the chart. With arranged data, it is very easy to find out who your best salesperson is, which marketing medium is the best converting one and which state has the best employment rate.

### 3. Use slanted labels

When you are using a horizontal chart (column, line, area, waterfall etc) and the labels are long or there are too many of them in a small space, slant them for better readability instead of rotating them.
With the column chart you have the advantage that if the labels are very long, stretching into multiple words, you can use the bar chart instead. However, you don’t have this option for the other charts where slanted labels will come in handy. Of course, if you have well understood labels like month names, you can skip alternate labels and keep them horizontal.

4. Delegate detailed info to tooltips

Let’s say you work in a hotel. You had a dip in reservations in September because a new hotel opened nearby and then you picked up again in October because you started offering a 25% discount. If this has to be explained to users (management in this case) by means of a chart, putting all this info on the chart itself will make it very cluttered.

In cases like these, putting the detailed info in tooltips is of immense help. Only when the user is interested in getting more info about a data set, he hovers over it and gets all the required information. Your chart stays clean, yet you have given out all the info.
5. Add a context to data

Data analysis becomes more meaningful when the data being plotted on the chart is given a context. This is done using trendlines. With the context, it is easy to analyze if the sales figures in the current year are better than last year’s or if the target was met.
Without the trendline, the chart would have just been showing the monthly sales for the year and you would have inferred that Q1 was good for you and Q3 was bad. With a simple trendline added to the chart, you can also infer that the sales achieved for most of the months were below the target and you have not met your annual target.

6. If the chart has drill-down, say it

If your chart has drill-down from annual to monthly data, monthly to daily data or category-based drill-down (regions to states), clearly mention that at the top of the chart. If you don’t do that, most users will not notice the drill-down and will be analyzing the chart only at the macroscopic level.

7. Use breadcrumb-style captions for drill-down

Breadcrumbs are a navigation aid used in websites, applications and documents. It helps users keep track of where they are within the website with the ability to jump to any of these locations.
When there is just one drill-down level, it is pretty easy for the user to keep track of where he is but anything more than that becomes a cause of concern for the user, especially when he is deep in his data analysis. That’s where breadcrumb style captions come in.

Of course, it is not essential to use a breadcrumb-style caption in its entirety, especially for time-based drill-down. For example if you have a drill-down from 2012 > Q1 > January showing sales figures, then the caption could just say: Sales Figures for January 2012. However, in category-based drill-down, a complete breadcrumb-style caption is the best way to go.
8. Remove unnecessary precision

If you are talking about four million dollars of profits every year, then talking about the twenty five cents part of the figure doesn’t add much value. Remove the unnecessary precision.

Round off the numbers to their nearest integer, or even hundreds and thousands.
9. Show predicted values using a dashed border

Many a times during sales forecasting or project planning, you need to show predicted values on the chart. To avoid the user mixing up the known and the predicted values when he is deep in his analysis, show the predicted values using a dashed border.

Dashed borders are sometimes used to highlight a data set as well. But with a small note in the caption or axis labels mentioning this, you can make it clear that you are showing predicted values using the dashed border.
10. Use vertical separators when plotting data for irregular intervals

Say you are displaying monthly data from Nov 2010 to Aug 2011 which happens to be an irregular time period to plot data for. People are either used to seeing monthly data for all the 12 months one after another or quarterly data for all the 4 quarters one after another, but surely not monthly data for Nov 2010 to Aug 2011.

Typically, the dynamics from one calendar year to another change quite a bit. To make sure that the user knows when 2010 ends and when 2011 starts even when he is deeply immersed in his data analysis, put a vertical separator line between 2010 and 2011. Your data stays the same, just that with the separator you are doubly sure the user will know the transition from one year to another.
About FusionCharts

FusionCharts Suite XT is the industry’s leading enterprise-grade charting component with delightful JavaScript charts that work across devices, browsers (including IE 6, 7 and 8) and platforms. Using it, you can create your first chart in under 15 minutes and then choose from 90+ chart types and 965+ maps to give your data the best face. It comes with 1,500+ pages of exhaustive documentation, plug-and-play versions of real-world demos and personalized tech support.

21,000 customers and 450,000 developers in 118 countries and Fortune 500 companies like LinkedIn, Microsoft, Cisco, GE, AT&T and World Bank use FusionCharts Suite XT to go from data to delight in minutes.

Learn more about how you can add delight to your products at www.fusioncharts.com