

Charts in Excel

Eight Suggestions for Displaying Data

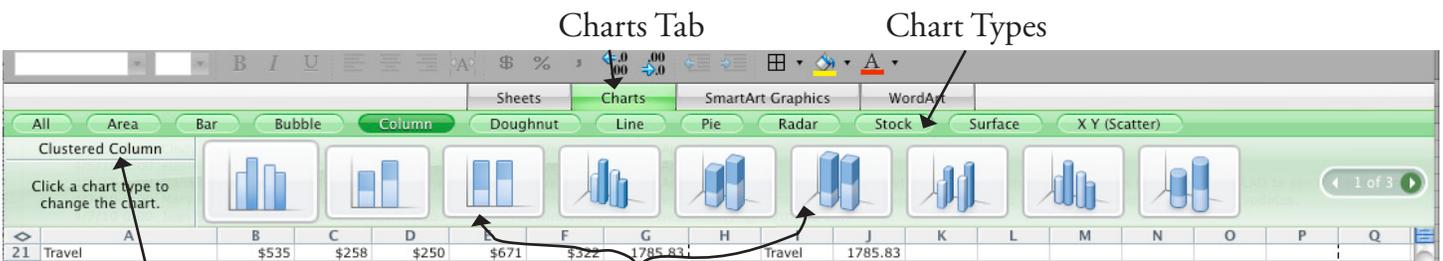
1. Show as much data as possible, in as small a space as will display it comfortably.
2. Make sure your chart's scale and time-span are appropriately sized to accurately and honestly represent variations and trends.
3. Strive to show a lot of data with minimum ink (avoid "chart junk").
4. Set up your charts so the most important comparisons are easily seen (ie already next to each other).
5. Keep a standard baseline- "stacked" line or area charts give a misleading view of the information.
6. Order graphs and tables by values or results- not alphabetically.
7. Get rid of decimals when possible for a more easily scan-able display.
8. Keep a monochrome color scheme, it's less distracting.

Starting Your Chart

A chart starts with a table of information with row and column labels.

15							
16	Sum of Amount	Date					
17	Category	Jan	Feb	Mar	Apr	May	Grand Total
18	Computer equipment	558.25	2161.89	1829.58	1896.42	501	6446.14
19	Professional development	470	182	276	891	1050	1819
20	Supplies/Misc	1166.12	517.34	2078.67	292.81	180	4054.94
21	Travel	535	257.9	250	670.64	322.29	1785.83
22	Grand Total	3467.09	3207.06	5472.54	3798.86	547.53	16493.08
23							

1. Select the data range you want to base your chart on. The above example came from a Pivot Table, and since we don't want our "Grand Totals" displayed, we didn't select them.
2. Click the "Charts" tab of the Elements Gallery.
3. Choose a chart type, and then a specific variant of that chart type.



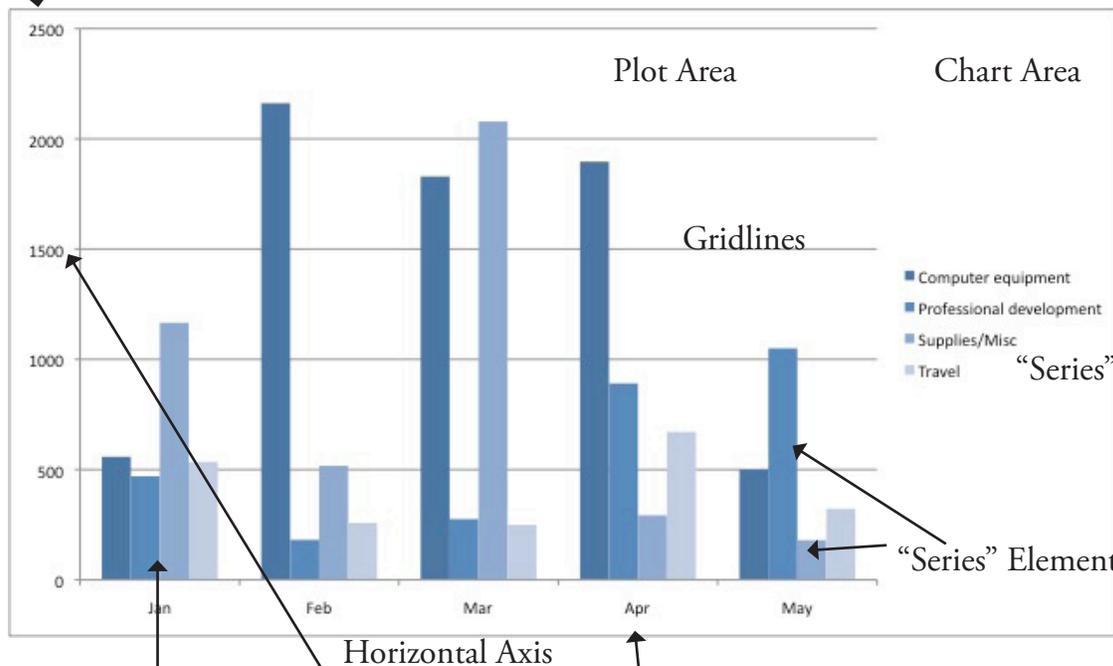
Description of Chart Variant

Specific Variants

4. Excel will create your chart as a floating object in your spreadsheet.
5. To try out different chart types, just keep clicking different ones. Excel will change the chart.

Anatomy of a Chart

Vertical Axis- Values



Note which parts of our table were used for the different chart elements:

15							
16	Sum of Amount	Date	Horizontal Axis				
17	Category	Jan	Feb	Mar	Apr	May	Grand Total
18	Computer equipment	558.25	2161.89	1829.58	1896.42	501	6446.14
19	Professional development	470	182	276	891	1050	1819
20	Supplies/Misc	1166.12	517.34	2078.67	292.81	180	4054.94
21	Travel	535	257.9	250	670.64	322.29	1785.83
22	Grand Total	3467.09	3207.06	5472.54	3798.86	547.53	16493.08
23	“Series” Elements		Vertical Axis- Values				

When you update the source data, the chart should automatically update to reflect any changes.

Chart Formatting

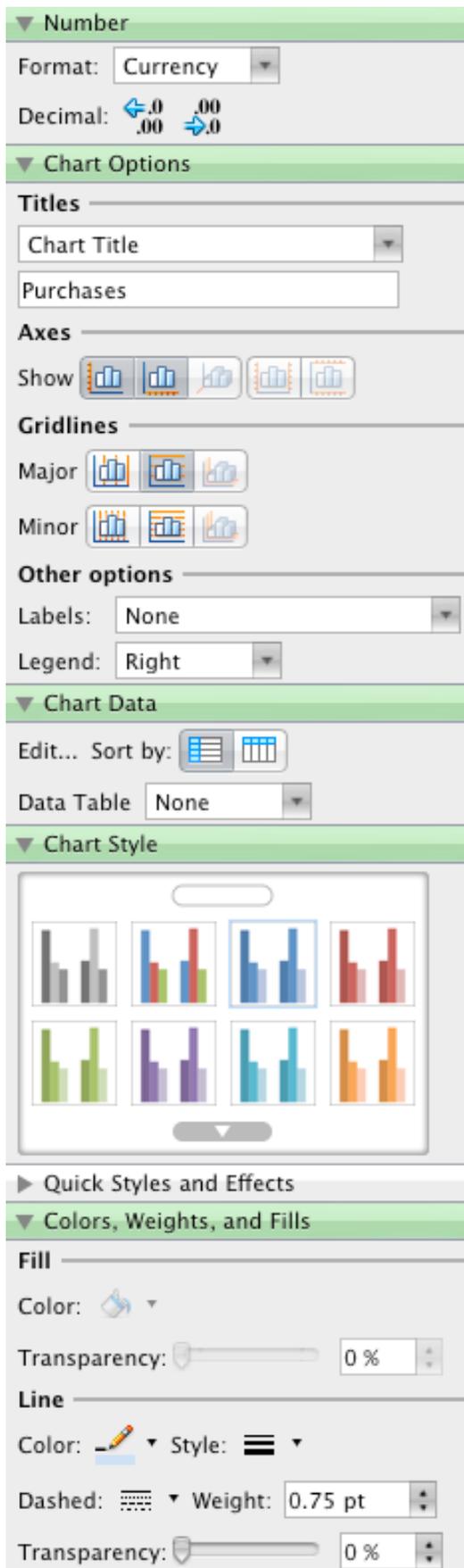
Now that your chart is created, you can change the formatting of color scheme of each chart element.

There are a few different ways to do this:

- View Menu > Toolbars > Chart gives you a drop-down menu of each chart element, with a “change format” button and some other commands.
- Double click an element and a formatting window will pop up.
- Use the Formatting Palette (View Menu > Toolbox > Formatting Palette) to make changes to whatever chart element you have selected at the time. This is what we’ll use.

Formatting Palette Options

Remember- Changes you make here apply only to the Chart element you have selected at the time.



Number

Change the number format, usually of your vertical values axis. (Hint- if this doesn't do anything, double-click the vertical axis and make changes through the formatting dialog box instead. You may need to make the formatting un-tied from the source formatting.)

Chart Options

- Add titles to your entire chart, or horizontal and vertical axes (choose from drop-down)
- Show or hide axes labels.
- Show or hide major or minor gridlines.
- Add labels to your plot area data.
- Change legend location.

Chart Data

- “Edit” to change the data range your chart is based on.
- “Sort by” allows you change what appears as your main horizontal axis values (ie swapping the horizontal values with your “series” values).
- “Data Table” adds a simple table of the actual data to the bottom of the chart.

Chart Style

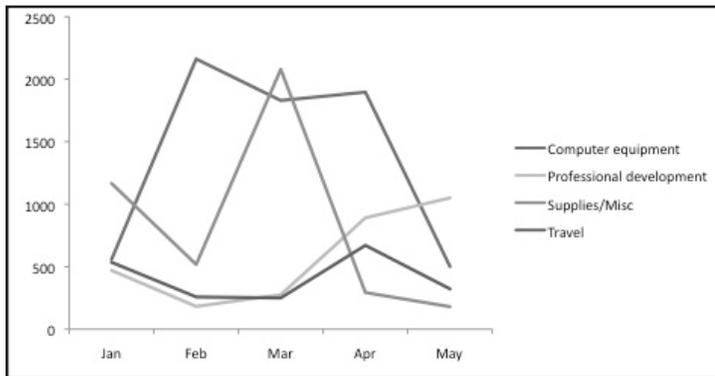
Pick a color scheme for your graphic elements.

Colors, Weights, and Fills

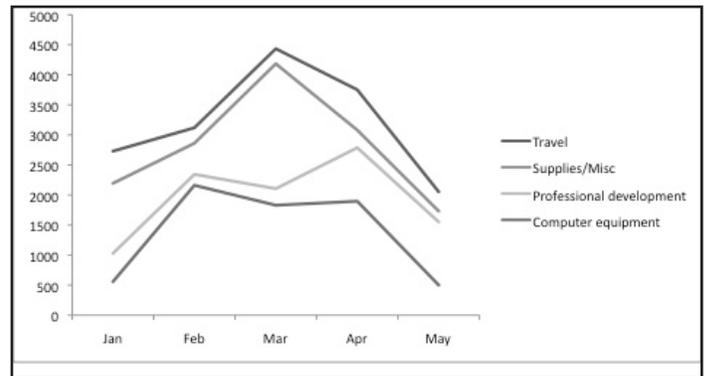
Add fill color or lines. Remember, this only applies to the element you have selected at the time.

Chart Types

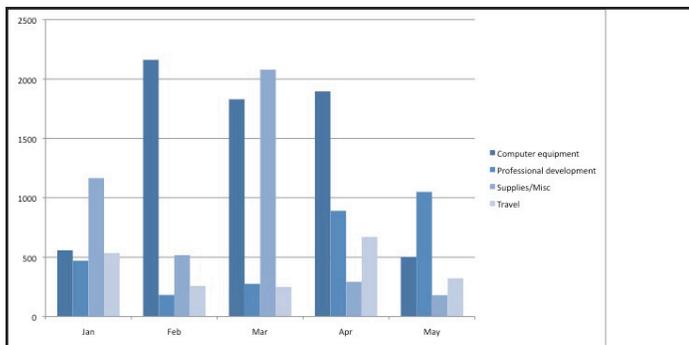
Here are some chart examples, all using the data range from page 1.



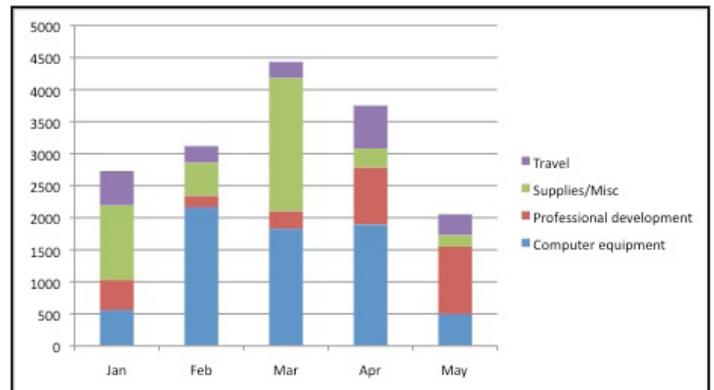
Line Chart- Useful for seeing trends over time.



Stacked Line Chart- Shows each value added onto the one below it. Makes gauging actual changes in each category very tricky, and can be very misleading. (Compare to regular line chart @ left)



Clustered Column Chart- shows individual category values for each horizontal section.

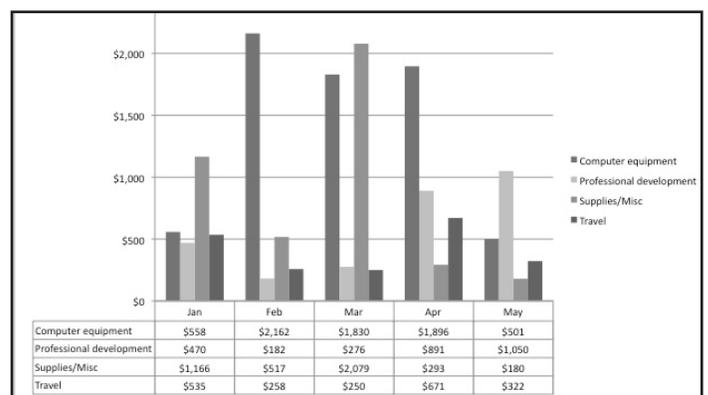


Stacked Column Chart- shows each category as section of total value.



Pie charts are considered sort of useless because they display such a small amount of data. This information could just as easily be shown in a small table:

March	5472.54
April	3798.86
January	3467.09
February	3207.06
May	547.53



A chart with a table added.

Moving Your Chart

You can grab and drag the edge of your chart to move it around within your spreadsheet, or you can move it to its own sheet.

To move to a new worksheet:

Right Click > Move Chart... and choose “New Sheet”.

This will create a full-page version.

It will still be linked to the original data and will automatically update as necessary.

Saving as a Picture

Useful for using a chart in other applications.

Right Click > Save as Picture. We recommend choosing JPG file format.

Resources and References on Displaying Data:

www.edwardtufte.com - Edward Tufte is the author of some fabulous books on the theory of displaying data.

www.informationisbeautiful.net - a cool blog with examples of creative and interesting displays of data.

For More Help with Excel:

Microsoft's Office Help Pages-

Step-by-step instructions, videos, and courses on lots of Excel functions and features.

<http://www.microsoft.com/mac/help.msp>

Borrow a copy of “Excel for Dummies” from Asha.