

Turning Data into Information – Tools, Tips, and Training

A Summer Series Sponsored by Erin Gore, Institutional Data Council Chair;
Berkeley Policy Analysts Roundtable, Business Process Analysis Working Group (BPAWG) and
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Creating Supergraphics with Microsoft Office

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Overview of the Tool

Supergraphics are a way to provide a large amount of information on a single sheet of paper, so readers can compare information from different sources, examine relationships, and view information adjacent in time (i.e., more variables in a single illustration) instead of stacked in time (i.e., a series of related or sequential illustrations on successive pages). In his seminars, Edward Tufte frequently discusses replacing a PowerPoint presentation with a single 11x17 sheet of paper, folded in half.

In some cases, you may want to use this “supersheet” as a set of four portrait-oriented sheets of standard-sized paper, with small graphics and tables integrated in the text, as these two examples show (no, you’re not supposed to be able to read them; we’re only interested in the layout here):

The image displays four examples of supergraphics, which are data visualizations designed to fit on a single sheet of paper. Each example integrates text, tables, and charts to present complex information.

- Example 1: Comparison of California Resident, Out-of-State, and International Undergraduate Students.** This graphic features a title, a main text block, and several small line and bar charts comparing student demographics across different categories.
- Example 2: Berkeley Graduate Profile.** This graphic includes a title, a main text block, and a large table with multiple columns and rows, likely detailing graduate student statistics.
- Example 3: Berkeley Undergraduate Profile.** This graphic includes a title, a main text block, and a large table with multiple columns and rows, likely detailing undergraduate student statistics.
- Example 4: Berkeley Undergraduate Profile.** This graphic includes a title, a main text block, and a large table with multiple columns and rows, likely detailing undergraduate student statistics.

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How to Get the Tool

You almost certainly already have an office suite installed on your computer. We used Microsoft Office (<http://office.microsoft.com>) to produce the examples shown in the additional handouts, but OpenOffice.org (<http://www.openoffice.org>) or Apple iWork (<http://www.apple.com/iwork/>) would do just as well. Actually, you can use any software, as long as it allows you to set page sizes ranging from 8.5x11 up to 11x17, and insert both graphics and text as floating objects. Supergraphics are really more about how you arrange things, and how you display data, rather than the output of any specific software product.

How to Use the Tool / Examples

There are several things you might want to consider both before and while developing a supergraphic. We've listed a few of those that we consider most important in this section.

When Should I Consider Using a Supergraphic?

- You want to present information in an adjacent, rather than a sequential order, so that readers can compare multiple data values and see relationships among them.
- You want to tell a story on one sheet of paper.
- You want to take something big and discuss it in segments, but illustrate how the parts fit into the whole picture.
- You want to present information that isn't just text oriented, but incorporates large-scale or numerous visuals and graphics.
- You notice that you keep getting related questions on a particular topic.

What Should I Think About as I Start Working on a Supergraphic?

- Can the document stand alone, or does it require an introduction and explanation?
- Can you and/or your recipients produce a document at a large scale (e.g., 11x17) and if not, how does it look in a smaller format (e.g., 8x11)?
- What is the quality of your printer? Start with a quick sample of the supergraphic before investing a lot of time, and see how it prints out and what you might need to do (e.g., color choices) to achieve the best print quality?
- How will you keep track of the related documents used to feed the supergraphic?
- Consider the different venues and formats in which the supergraphic will be used, and adjust formatting accordingly. For example, if the supergraphic will be displayed as a slide, you may need to make text larger or add audiovisual content that wouldn't be possible with a handout.

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How Do I Create a Supergraphic?

- Create your supergraphic in a tool that works not only for you, but also for anyone else who might need to edit the document (e.g., Visio vs. Word).
- Have someone else look frequently at your supergraphic while you're creating it.
- Think ahead about how you want to develop the supergraphic – do you want to produce all the pieces first and then arrange them on the page, or do you want to start with something and create pieces to fill in around that?
- Use text boxes (in Microsoft Office products, choose Insert / Text Box on the menu bar) for precise control over the placement of text on the page.
- When importing charts, say from Excel into Word, you may find that trying to link or embed them causes more problems than it solves. You can always insert them as pictures, in which case doing a Paste Special As Enhanced Metafile seems to give the highest quality results.
- If you're printing the supergraphic at 11x17, think about where the fold will be.
- Brighter colors draw the eye, so think about where you can use them for the biggest impact.
- Make data density your priority, and then keep editing for clarity.

References/Other Resources

All four of Edward Tufte's books – *The Visual Display of Quantitative Information*, *Envisioning Information*, *Visual Explanations*, and *Beautiful Evidence* – contain many examples of supergraphics. He also includes a couple of discussions on the use of handouts in presentations in *Visual Explanations* (pp. 68-71) and *Beautiful Evidence* (pp. 184-185). Finally, his blog has a lengthy thread on the topic at http://www.edwardtufte.com/bboard/q-and-a-fetch-msg?msg_id=00001B.

There are many free Microsoft Office training classes available through e-Learn and the UC Learning Center, which you can access through the Blu portal (<http://blu.berkeley.edu>) in the Self-Service area.

As a university employee, you also have free online access to many books on desktop productivity software through e-Learn's Books 24x7 (using the Blu portal at <http://blu.berkeley.edu> as noted above) or through the Safari Books Online service provided by the UC Berkeley Library (http://www.lib.berkeley.edu/find/types/electronic_resources.html).

Finally, you can view or print an excellent set of quick reference cards for various desktop software products at http://customguide.com/quick_references.htm.

