



Guidelines for Designing Data Demonstratives

Our clients do not want pretty pictures. They want to communicate to the jury. They want to win their clients' cases. They want to make Partner. They want a bigger bonus. They come to us for help achieving these goals.

The business of this firm is to design information for presentation to a jury, the court, a client or any other group of people in such a way as to further our clients' goals. To do so we must balance the need for absolute truth and integrity in our designs with the fact that we are acting as advocates for our clients' position. Thus, the principles of information architecture, as described herein, which are formulated for strict factual analyses, may need to be bent to reflect our position as persuaders.

Information design begins with an honest reasoning about the evidence, the story we are building, and the act of advocacy. Ask yourself, "What is the intellectual task that this display is supposed to help with?" "How does this fit within the story I'm telling?" "How does this advance my client's position and convince the jury?" The answers to these questions will form the framework of your demonstrative and the entire presentation.

Follow these guidelines to create better information displays.

1. **Make Good Visual Comparisons:** Force an answer to the question, "Compared with what?" For example, do not simply say/show that revenues of the company are up. Show that they are up compared to: expenses, workforce levels, industry performance, etc. Do not say only that customer response times are as long as two days. Compare that with the average over time, industry norms, the best in the industry, etc. Give the audience some kind of "yardstick" to measure your data against.

In the Example at the end of this document, we see in the pie chart series, we give the viewer the industry average use of soylent green which provides the basis for analyzing our own use of the product.

2. **Show Cause and Effect:** Design the information to explain the underlying mechanisms and answer the question, "Why did it happen?" or "What caused that?" In litigation, we are always trying to answer this question as it proves/disproves liability for some event or action. You may have to be subtle or forceful with the answer to this question depending on the nature of the answer and the personality of the case. We all understand natural cause-and-effect events. Each demonstrative has the capacity to tell a story illustrating this relationship.

In the Example, combining the depiction of people and trade secrets coming from Myco to XYZ in conjunction with the increased sales revenues over time gives the viewer a clear cause-and-effect relationship and, we hope, a link to liability.



- 3. Charts and Graphs Should Be Multivariate:** Most problems require more than one or two variables to adequately describe them. It is a rare situation when only one variable changes as opposed to a variable changing in response to some other variable.

In our Example, we show both increased sales together with trade secret theft, employee raiding, and market growth. All data are plotted against time. In total we have 4 variables on the graphic. Each variable adds information and context to the whole.

- 4. Completely Integrate Words, Numbers and Images:** Make sure that the images, words and data fit together to form a coherent whole. A well-designed graphic needs no eye-candy. Images that simply complement the words are acceptable if they are used as reinforcement for the text or to give the viewer the emotional impression we desire. However, care should be taken to stay within the bounds of court guidelines and to not arouse suspicion in the audience's mind that you are using emotional messages because your data is weak or flawed.

Do not overlook the relationships between individual demonstratives. Any demonstrative must be internally consistent and also externally consistent within the larger framework of the case presentation, character of the trial and personality of the client. This pertains not only to background, layout, font, etc. but also to the choice of language, verb tense, illustration style and more.

- 5. There Is No Substitute for Good Content:** To improve the presentation, get better content. If your numbers are boring, you've got the wrong numbers. If your facts come from sources that are suspect, validate them with outside sources that demonstrate integrity. No amount of design will help if the data is not trustworthy or is irrelevant to the issue under debate. Think about the problem to find a solution to the problem, an answer to the question being addressed by the demonstrative.

In the Example, we validate our data with the source line at the bottom which demonstrates our use of reliable information and, therefore, the truth and accuracy of our position in the viewers' minds. Also, we have selected sales revenues because that is the figure against which we would calculate royalties owed to Myco. However, we might consider including the profits as well. If they are interesting to the viewer, as very high or very low, these numbers might effect the damages the viewer is willing to consider.

- 6. Information for Comparison Should Be Put Side-by-Side:** You can't compare things that you cannot see together. Do not say, "Let me show you our data. Now, let me show you their data." You must be able to say, "Let me show you our data next to their data so that you can compare." Although we sometimes have to place things one after another in a slide show due to limitations of resolution and screen size, this kind of sequential display can blunt the point until it is completely useless.

It would be better to create three slides: the first with our data in detail, the second with their data in detail, and the third showing the data side-by-side for comparison. The third slide may be designed with lesser detail but with the salient comparison pointed out. When possible, the detail should be admitted as evidence and the comparison may



be admitted if sponsored by an expert as a summary chart. The example we have created could have been split into several charts and displayed sequentially: sales, industry growth, timeline, CEO quote, etc. By combining them, the viewer has the opportunity to make comparisons and conclusions.

- 7. Use Small Multiples:** Show changes by using many small pictures within the same field of view – like frames of an animation stretched out to be seen simultaneously. If specific details are to be brought out, do that either on another demonstrative or, if appropriate, within the same demonstrative in another area.

As seen below in our Example, the series of small pie charts tells the story of a market growing dramatically over the six-year period shown. This technique can be used to illustrate the lunar phases during a month, the progression of a skyscraper construction project, and the path of a downhill skier as he crashes into the snowbank and fencing.

- 8. Do Not De-Quantify:** Numbers have meaning. Do not reduce quantities to on/off or yes/no, here/there. Use numbers or graphs to represent them. If we quantify things accurately, the audience will trust our display. If we remove the quantities and refuse to show them our data, they will distrust our displays and our clients. It is acceptable to combine both the trustworthy data and a statement that attempts to either draw conclusions or state a fact demonstrated by the data.

In our Example, we might have simply stated that since the trade secret theft, XYZ profits rose more than 2,000%. Dramatic as that statement is, it leaves our viewer wondering what the data really is. How much more than 2,000% was it? Over what period of time? What was the market doing? On the other hand we include a conclusory statement in the title block satisfying our role as advocate.

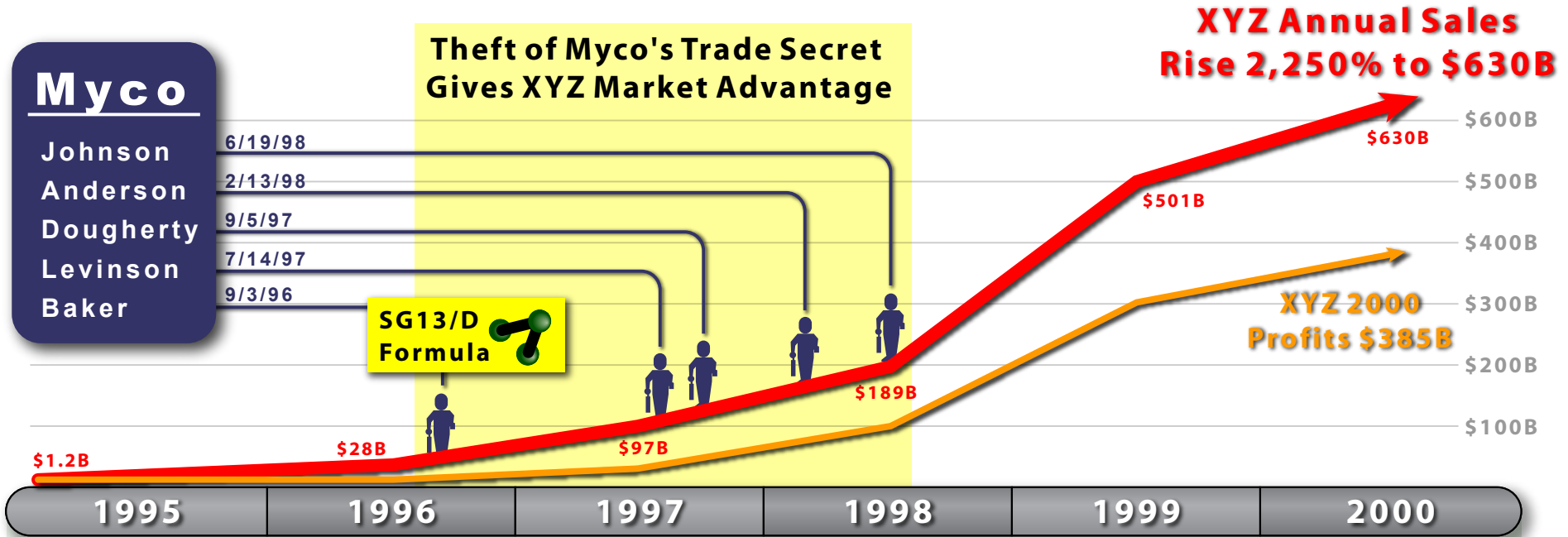
- 9. Use Colors Carefully:** Colors can have a great effect within information displays. In general, use colors found in nature. Select from a unified color palette used throughout the presentation. The color scheme generator on the web (<http://www.pixy.cz/apps/barvy/index-en.html>) is an excellent source. Try the Contrast – Base + Compliment setting or the monochromatic setting for a pleasing arrangement. Take a screen shot and open it in Photoshop to sample each color for RGB values. You can also preview the effects of color blindness on your colors.

- 10. Use 3D Effects Judiciously:** Using effects such as drop shadows and emboss can add a great deal of interest to a demonstrative. It can also add clarity and meaning if used well within the design. Unfortunately, it is all too easy to rely on effects to make our demonstratives attractive when what they really need is better design. Make sure that effects are used to help separate or enhance certain structures that are truly important and not things that should be relegated to the background.

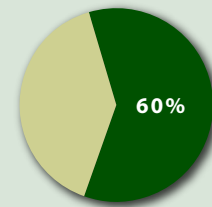
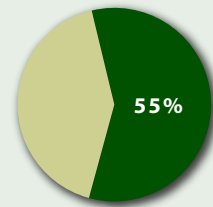
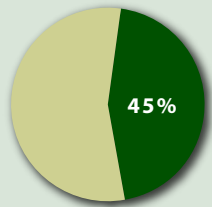
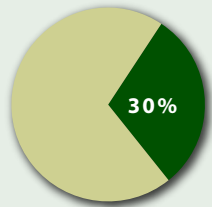
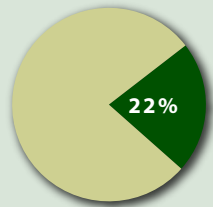
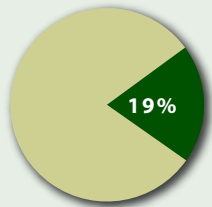
In the Example, some elements are pushed to the back, like the graph value lines, by reducing their visual importance. Other elements are brought to the foreground, and thus increased importance, by selective coloring or a drop shadow effect.

The Theft of the "Soylent Green" Trade Secret

XYZ's CEO says, "It was magic - like nothing we had ever seen before."



U.S. Products Containing Soylent Green - 2000 Worldwide Average: 24%



281% Increase
in Soylent Green Use
2.5X More
than Worldwide Average