



You Oughta Plea in Pictures

To make a stronger business case, put away the spreadsheets and get out your pencil.

Scott Leibs, CFO Magazine
February 1, 2009

In 2007, as a major U.S. publishing company contemplated going public, it realized it had a problem: no one had ever heard of it. Despite broad market penetration and an impressive breadth to its product line, the company feared that its anonymity would have a devastating effect on its offering price.

So it did what most companies would do and hired consultants to provide some answers. Three months later the consultants did what most consultants do and delivered a ton of data — the executive summary alone ran 60 pages. The firm had interviewed hundreds of current and prospective clients, and there was a good chance that the answers that the publishing company sought lay buried in the PowerPoint slides and supporting documentation that the consultants delivered. But extracting the ounce of gold from the ton of ore looked to be laborious in the extreme.

Another consulting firm was hired and given only a few weeks to make of the data what they could. It was a daunting task, particularly given what they ultimately produced: a single ingenious chart that positioned the company against six major competitors in terms of brand recognition, breadth of offerings, and markets served (see "From the Simple to the Sublime" at the end of this article). That concise snapshot of a complex business landscape proved momentous. The company ultimately made a \$17 billion acquisition that overnight gave it household-name status and market dominance. The CEO was so impressed by the role that the chart played in this move that he had it framed and placed on the wall behind his desk, where it remains.

If the chart was good for the publishing company it was a positive bonanza for Dan Roam and his small consulting firm, which produced it. "I call it the million-dollar chart," Roam says, "because it led to so much more business for us." It was also one of the success stories that inspired *The Back of the Napkin*, one of last year's best-selling business books. *The Back of the Napkin* is both a manifesto and a how-to manual that demonstrates just how well the art of the deal can be enhanced by, well, art.

In truth, "art" is overstating it, which should come as a relief to anyone who wants to duplicate the success of Roam and his colleagues. "Visualization" is more accurate: if you can draw basic geometric shapes, lines, arrows, and stick figures, you have all the skill you need to put Roam's ideas into practice and produce a vast array of concept and network models, diagrams, schematics, flow charts, tables, and other representations.

Roam is not the first person to stress the power of pictorial analysis. In 1969, Rudolf Arnheim's *Visual Thinking* made a compelling case that while perception and reasoning may seem like two distinct mental activities, in fact neither one can occur without the other. More recently, in the business world, the concept of "strategy maps" has been advanced by Robert Kaplan and

David Norton (creators of the balanced scorecard) as providing a "visual epiphany" that helps business leaders connect processes to desired outcomes.

Roam argues that executives should reach for the pencil not only when addressing a discrete task such as drawing a strategy map, but in myriad situations in which "the problem [or the solution] is hard to see." That may be a challenge for finance people, who are accustomed to believing that all answers can be found in the numbers if one simply drills down far enough. And, in fact, Roam concedes that those in finance are often what he calls "red-pen" people, who question the entire idea of visualization — right up to the point where they grab a red pen and redraw everything. "I often need to work harder to convince finance execs than any other group," Roam says. "But they become the most ardent backers of the concept." (For the record, the other two classes of people in Roam's world are "black-pen" people — those who are instantly drawn, so to speak, to visualization — and "yellow-pen" people, who are happy to build upon someone else's initial stab at visualization.)

It may help to know that Roam has consulted with the finance department at Microsoft, where, not surprisingly, employees can "make spreadsheets do pirouettes in ways mere mortals can't," he says. Nonetheless, they "understand that insights often depend on looking at the data in a more visual form."

Drawing Conclusions

As Roam sees it, most business problems can be framed as a variant of the five W's, or, more accurately, four W's and an H: who, what, when, where, and how. He walks the reader through the kinds of pictures that can be used to illustrate each kind of problem. In an extended example, he begins with a small accounting-software company that wants to better understand who its customers are. It draws itself as a small building and its typical customer, a large enterprise, as a bigger building, and then sketches in the hierarchy of executives and employees that it must communicate with at such a client.

Right away, Roam says, the picture makes explicit an important fact: the company has more types of customers than it might have thought. Building on these early pictures, the software company continues to refine its vision of the market, charting which people within the customer site are its biggest customer group and comparing that with how much each group spends on the company's software.

The example continues as Roam shows how the software company tackles the remaining W's (and H) and eventually realizes that it had heretofore failed to grasp the buying influence of the client's technical group, and in particular a single individual whose importance would almost certainly have been missed if the analysis had been handled in a more conventional, nonpictorial manner.

By following this example through a number of twists and turns, Roam demonstrates how everything from bar graphs to org charts to Venn diagrams can be used to depict a business situation and sketch out a solution. (In this case, the company discovered what it would need to do to improve its product, and gained confidence that a \$9 million development effort would pay off.)

Roam agrees with critics who say that his step-by-step guide may overrationalize what is to some degree an intuitive process, but he takes that criticism as a compliment. "I wanted to provide a very linear explanation," he says, "so that I don't come across as a business poet. I wanted to present it in a very structured way, as it would be in a business-school class."

The Back of the Napkin may call to mind Malcolm Gladwell's *Blink*, another best-seller that explored the link between visual impressions and cognitive response, but Roam says that while Gladwell sought to understand why some snap judgments are surprisingly accurate while others are not, his own intent is to "understand why it works when it does, and how to repeat the successes."

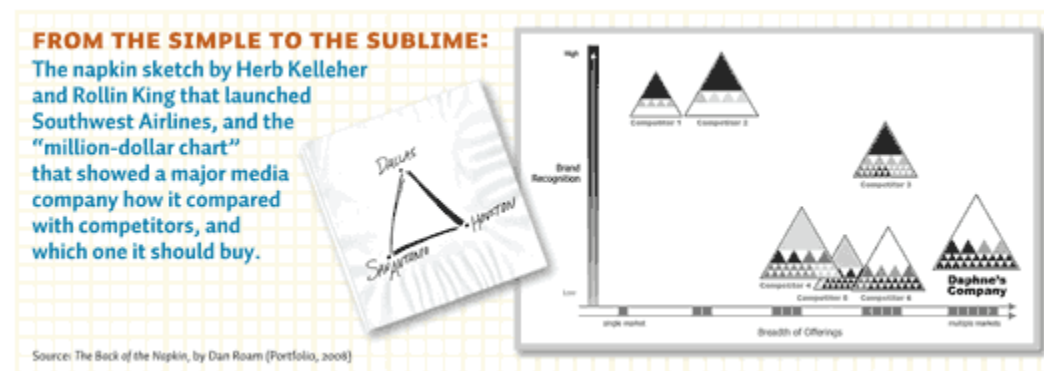
It does not, in fact, always work. Two of the most common ways that the technique misfires concern complexity: people at the whiteboard get so caught up in picturing a problem or a situation that they forget they have an audience that they should involve and instead treat the picture-making process as a solo performance; or they begin with an overly complex representation, such as a timeline, rather than simply sketching out a kernel of an idea and allowing the brainstorming to unfold organically.

And even simple representations of data can be misleading. Roam says this is of particular concern to CFOs, who are often urged to rely on a "digital dashboard" of key metrics. "The metaphor is that of the pilot who uses just such a dashboard in the cockpit," Roam says. "But I always counter with the example of an Air Canada flight that narrowly avoided disaster en route to Lisbon in 2001. The instruments gave conflicting indicators regarding a fuel leak, prompting the pilots to inadvertently dump fuel." Sometimes it's important to resist focusing on a single set of data, no matter how accurate it may be. The interplay between many variables often holds the key, and that's when visualization can be invaluable.

Later this year Roam will publish a workbook that provides more case studies and exercises, a "self-guided tour" that should help anyone interested in this approach to problem-solving overcome the single biggest obstacle: fear of being laughed at. "It never happens," Roam says, "no matter how silly your picture is. When we see a picture being made as the person explains what they're doing, our brains fire on all cylinders; the quality of the drawing is meaningless."

So for your next meeting, leave the laptop behind and instead bring a few whiteboard markers. You may find that even a lousy picture is worth a thousand rows and columns.

Scott Leibs is executive editor of CFO.

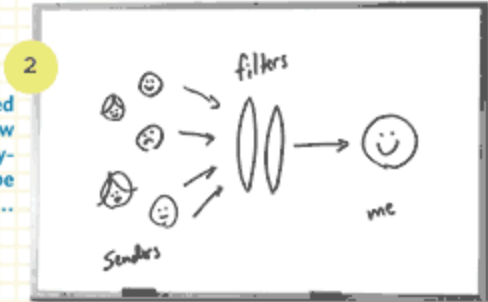


IDEAL VERSUS REALISTIC:

When a bank wanted to adopt a more efficient way of coping with the onslaught of E-mails, Web conferences, and other communications that impeded productivity...



...it began by sketching a picture of its time crisis...



...then created an ideal view of how everything would be filtered...



...and finally developed a more realistic view of how inbound and outbound filters could make communications more manageable.

Source: The Back of the Napkin, by Dan Roam (Portfolio, 2008)