An Interview with Edward R. Tufte

How Facts Change Everything (If You Let Them)
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Information-visualization guru and famed PowerPoint debunker Edward Tufte explains how businesses would think better, make better decisions and present themselves more powerfully if only they would learn to talk — both internally and externally — in facts.

BY EDWARD R. TUFTE, AS TOLD TO JIMMY GUTERMAN

Edward R. Tufte is best known for his revolutionary books about the visual communication of data and information and his popular traveling course promoting his theories and methods. Tufte, dubbed “the da Vinci of data” by the New York Times, saw his profile in management circles raised by an essay about Microsoft Corp.’s PowerPoint (it appears in his most recent book, Beautiful Evidence, Graphics Press, 2006) that laid out the corrosive influence that presentation software has on thought. Tufte, professor emeritus at Yale University, is not just a critic. He’s a practitioner, too: He self-publishes his books to his exacting standards, and he recently debuted his first major museum project, a show of sculptures and prints, at the Aldrich Contemporary Art Museum, in Ridgefield, Connecticut. At his home in Connecticut, surrounded by his sculptures and his dogs, Tufte held forth with authority on everything from

THE LEADING QUESTION
How can companies best present themselves and their products?

FINDINGS
- Concentrate on delivering facts, not pitches.
- Deliver as many of those facts as you can.
- Don’t count on the marketing department to make this happen.
- Look to news sites and scientific publications for models of success.

Whether astride his own sculptures (he’s pictured here on “Rocket Science”) or the world of information design, Edward R. Tufte is ambitious and intent on changing the way we look at things.
On the (Very, Very Bad) Design of Corporate Web Sites

The front page of a good news site will have 300 links on it. That’s great. And so the question is: How come your corporate Web site has only seven links on its opening screen, and the links are called “sharing our values,” “participating” and so on? No user has ever asked Google to show him all the Web sites about sharing your company’s values.

A corporate Web site should do what a good news Web site does. If you look at the really successful Web sites where there are millions of hits, especially nonfiction Web sites, the New York Times and Google News, they all have 300 links on the opening page. How come businesses don’t do that? How come the links are to “sharing,” “participating” and “our values”? That’s flabby design for flabby content. The models for presenting nonfiction should not be what your competitors are doing, but rather excellence in reporting nonfiction. And there are terrific examples out there for reporting nonfiction.

The kind of conformity toward flabbiness in corporate Web sites is astonishing, and they’re imitating one another in their content and design flabbiness. It’s silly. People are inherently distrustful of them. And yet most of those sites are, in fact, about reporting facts. But they get softened up by the marketing people. You get all these pressures that tend to normalize design, that tend to make it like other corporations and that make things intellectually flabby and visually flabby. They turn into pitches.

Marketing and the bureaucratization of design approval are the big enemies of design. There are probably 20 special interests that want to leave their thumbprint on every design. There’s accommodating to ISO [International Organization for Standardization] standards. There’s accommodating to people whose eyes are getting old. There’s adjustments to what the competition is doing. And then there are, alas, the marketers and the lawyers.

Many of these special interests have worthy claims, but when they all pile on, it results in compromised, vague and generic — but very expensive — designs. Design excellence has to defend itself and make appropriate adjustments without losing the integrity and coherence of the hands-on work.

In large corporations, it’s very hard to get control of design. Thousands of employees are putting vast amounts of visual material up for public consumption: forms, advertising, interfaces, manuals and on and on. This material represents and exemplifies the corporation. It’s the direct expression of the corporation. If there’s a well-thought-out design standard, it should be followed. At the very highest level, great design comes from great designers. This is empirically the case. If a great designer did a first-rate standard, that model should be followed. Great design is not democratic. It comes from great designers. If the standard is lousy, then develop another standard.

Standards and templates are an efficient way to produce decent design. In the corporate world, the key word here is “efficient,” or, as Steve Jobs once said, “Real artists ship.”

It’s important to keep the distinction within the corporation between information, the nonfiction work, and the pitch material, which is fiction. The corruption in design manuals arises because too often they’re done by commercial artists, usually very pricey firms, who often would rather be working in marketing. That’s a big, wonderful job to get, to do the branding and the corporate design manual. And that leads you then to commercial art, and leads then inevitably to the corruption of nonfiction performances. Your nonfiction performances, when guided by commercial art standards, just become another pitch.

On Opaque Communication and What It Says About a Company

One of the key indicators that a company is corrupt (and we’ll all find out about it in six months) is that its corporate statements are opaque. Sometimes good finance reporters will use “opaque” as a code word to
say they think there’s something corrupt here but they haven’t nailed it down yet. It’s a clear signal.

If something is opaque, it’s not because the smart people running these corporations are confused. It’s because their enterprise lacks transparency. That surfaces in the opacity of their material. Opaque presentations can come about because of a number of sources. One is just intellectual flabbiness and the pitchy quality. The other is they’re trying to do a lot of disinformation design and cover things up, for example, investing in things that nobody in the world can understand. Think Enron, think Everything these days. If a Web site seems blurry or talks about “sharing our values” instead of nonfiction details, that’s an indicator.

It sure helps if you’ve got good products, as, for example, Apple and Google do. Part of the spirit of content-centered work and content-centered design is continuously recognizing the importance and the merits of the content, which in a corporation is what it actually does. Not what it says it does or how it’s pitched, but what it does.

Pitching distorts the market and reduces what should be the meritocracy of the market, the sorting out the better from the worse. What prevent the markets from working are (1) monopolies and (2) enormous corruption that comes from the pitch culture. If you are flabby and opaque to the outside world, you are in turn intellectually flabby and opaque to yourself. Pitching out corrupts within. Everybody in the company sees the advertising and things going out, and that sets the standard. That’s part of what the company produces, and that in turn sets the standards for the company’s internal ethical and intellectual standards. Design represents the corporation.

**On Living in a PowerPoint World (Like It or Not)**

In an authoritarian institution, such as a corporation, there’s nothing like an order from on high saying, “From now on, we’re not using PowerPoint.” That will do it. People will work out something. Or a company can specify, “From now on, your presentation software is Word, not PowerPoint.” Of course, you shouldn’t be using proprietary formats at all.

As Eric Gill said, “If you look after truth and goodness, beauty looks after herself.” Those three words — truth, goodness, beauty — you’d never find them in a corporate design manual or a PowerPoint.

In business you get lots of advice from executives and councils, but you never know whether a statement’s true or not. Somehow there’s a sort of softness to the presentation. The cutting edge of data displays is not in business; it’s in real science. If you want to see the best graphics and displays around, you go to *Science* or *Nature*, the rock-star journals in science. Every week they’re full of real scientists with huge amounts of data, plenty of brain power and research resources, and they want to tell the world about their findings.

Financial people have a similar resource base. They’re smart, they’ve got huge amounts of data. And yet they’re operating at intellectual resolution and visual resolution at 5% or 10% of real science. Why? Because there’s such confusion in the financial world between analytic displays and pitch displays. In the scientific world, evidence is evidence. Certainly scientists emphasize their findings, but there are checkups on evidence and checkups on truth and the database is often public. That’s not true in the financial world. The graphical displays in the business world look like second-rate social science or third-rate marketing displays.

**On the Deceptions of Simplicity**

The urge to simplify is tough—guy posturing. “Just tell me one thing.” Executives are busy, they’ve got a lot more things to do than just listen to you that day, but they are not stupid. If they’re stupid, how come you’re reporting to them? How come you’re having to pitch to them?
You need informational depth. When people are presenting to you, you need to figure out what their story is, but you also need to decide whether you can believe them. Are they competent? Are they smart? Are they lying? You’ve got to make ethical judgments about their intelligence and their ethics. That comes in part from looking at how they think about a rich body of information. Detail helps credibility.

When someone says, “Just give me the highlights,” what they really mean is, “I have no sense of what’s relevant. I’m not willing to probe. I don’t have any time to think seriously about this problem.” But detail offers the impatient something wonderful: When you’re focused on data, not pitching, the meeting will be shorter. It’ll be more intense and you’ll have to work harder, but you’ll learn a lot more and you have a chance at making smarter decisions.

On Better Meetings Through Devotion to Facts
When I worked at universities, I was notorious for running short meetings. As a consequence, I got to chair the graduate admissions committee, where you have post-office buckets filled with materials. Normally these kinds of meetings last till midnight. We’d start at lunchtime. But we’d be out by dinner because the meeting was all about reading and saying, “What do you think of this?” We could make a lot of decisions quicker by devoting much of the meeting to reading. We read, we give a quick summary, we decide.

It also served to focus on each particular candidate and avoid flipping the switch of one’s colleagues that brings out the standard five-minute lecture. Staying in the evidence and in the material invites fresh or novel responses instead of the canned lectures that everybody carries around. It’s all very tight and focused, with a lot of detail in front of you.

I like an enforced reading period in meetings. It’s study hall. At Princeton and Yale, when tenure decisions were made — the most important thing a department can do — we sometimes did it this way. There could be a 25- or 30-minute reading period, and those of us in the meeting didn’t get to be senior faculty by being slow readers. Thirty minutes of reading is an enormous amount of information flow. And that had lots of desirable effects. First, it nearly put an end to your colleagues lecturing you, because you had already read about the candidate’s teaching and their work and where they went to school. It also put an end to the presenter cherry-picking the letters of recommendation, because everybody had the peer-review letters in their lap and they had read through them.

Meetings run this way are more participative and shorter, but people have to work harder. They have to think. But who could ask for more: smarter and shorter meetings?

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