

look_closely_right_now

THE INTERNET BESTOWS
AUTHORITY ON EVERYONE,
WHICH IS EXACTLY
THE PROBLEM

by John Seely Brown

For Lucent Technologies, the year 2000 opened with a flurry of negative rumors on Internet bulletin boards and chat rooms. Then on January 6, the company put out a press release with an earnings warning, seeming to indicate that people posting on bulletin boards and in chat rooms really did have a good idea of what was going on—despite their flaky online names such as “hot_like_wasabe,” “brain_and_the_kahuna,” and “Floydian_us.”

So in late March, when the Lucent discussion on Yahoo carried rumors of further problems in the second quarter, onlookers paid attention. On March 22, “kahuna_and_the_brain” guessed that there might be another earnings warning. Then, just before New York markets closed, “hot_like_wasabe” forwarded an item under the heading “LUCENT RELEASES EARNINGS WARNING! DAMN!” The item forwarded was a press release similar to the one in January, another earnings warning. Next, “Floydian_us” sent the press release to some 20 different message boards along with the comments of

a disappointed investor. As the news spread, Lucent’s stock began to sink.

But the “news” was pure fabrication. The press release was a fake. Before Lucent was able to get an authentic press release out, its stock value had dropped some \$7 billion. Of course, anyone buying while the price was down made a killing when things returned to normal. As the SEC discovered later, one such buyer was operating under the names “kahuna_and_the_brain,” “hot_like_wasabe,” and “Floydian_us.” A single person had orchestrated this trio of online identities, using names very close to those of established hands on the message boards: “Floydian_us,” “hot_like_wasabe,” and “brain_and_the_kahuna.” What’s in a name? Some \$7 billion, it appears, if you misread a 1 for an l or don’t pay close attention to word order.

This sort of fraud wasn’t developed by the Internet. Nearly 200 years ago, a messenger rushed from the English coast to London and announced Napoleon’s defeat, sending the price of stocks skyrocketing. However, the whole thing was a ruse. The year was 1814, and Napoleon’s fall at Waterloo was a year away. The messenger’s ride was just a clever ploy.

Both examples remind us that in turbulent times—in particular, political or technological revolutions—truth can be hard to read. (Which is why Senator Hiram Johnson said in 1917 that truth is the “first casualty” of war.) When old channels of information dry up and unfamiliar ones replace them, rumor,

deception, and misinformation can run wild. In such times, we all have to learn to read again. Ferreting out the truth isn’t the only problem. In the ideal world of logic, everything may be simply true or false. In the real world, we spend most of our time in the unmapped middle ground, amid endless shades of gray, trying to eyeball credibility, reliability, reputation, and general trustworthiness.

So most of the Net’s challenges to truth are also challenges to trust. Whom do you trust to tell you the truth in cyberspace? Do you know that the Floydian who contacted you yesterday is the one sending you a message today? Will Floydian be as trustworthy today as he or she was yesterday? Is Floydian really a person, or just a clever piece of software telling you what you want to hear?

And it’s not only individuals you have to doubt. The Net also has pulled the plug on much of the trust we put in organizations. You might trust the stories you find in your newspaper. But can you trust the stories on its Web site? You know what to make of a press release on TV news. But what about one on an Internet bulletin board? When is something published on AOL as trustworthy as something published in *Time*?

To handle such questions, as well as truth and trust, we need a third “t-word”: triangulation, which began as a navigational term for sailors and refers to using two points, other than yourself, to establish a location. We judge truth in terms of trust, and trustworthiness

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through triangulation, taking bearings not on the information alone but also on its context. Whatever people say, most of us actually do judge books by their covers, not just their content. Where you find information is usually as critical as the information itself.

With information bombarding us from every side, triangulation, putting information in its proper place, is both more critical and harder than ever. Triangulation relies on stability and continuity, but information now shifts easily across contexts, as shown in the example of the Lucent "press release" posted to a Yahoo discussion group. So today we all face the problem of trying to triangulate in a constantly changing "infosphere."

Inevitably, some people, noting the frauds and the phonies, conclude we should avoid the Internet. The Net to them is at best terminally unreliable, at worst a nest of deception.

This makes no more sense than rejecting the telephone because it can be used to tell lies. Moreover, these doubters misunderstand the Net's power. Sure, it can be a source of misinformation, but it also can be a great means for triangulation. Yes, Pierre Salinger, a savvy journalist in the old world of print and broadcast, was tricked into reporting that TWA Flight 800 had been shot down because of something he'd read online. But yes, too, the Net helped shoot down the story. Netizens quickly drew a bead on the untrustworthiness of Salinger's single document, which lacked any independent corroboration. Salinger tripped not because he used the Internet as a source for truth but because he failed to use it as a resource for triangulation.

Equally important, though, is the realization that the information superhighway is only a resource. Despite raw digital power, amazing scope, inventive software designers, and good marketing, trust and triangulation can't be automated on the Net. Much-talked-about "trust systems"—which include such things as reader recommendations on Amazon and seller reviews on auction sites—are popping up everywhere.

The best of these are pretty good and are key to developing new and trustworthy online markets. E-businesses often depend on them. But they have limitations that no wise user should overlook. The first is, paradoxically, a product of

their reliability. The more these systems inspire trust, the more they attract people who want to take advantage of that trust and game the system. The Lucent scam worked because of the trust people had developed in bulletin boards and their regular contributors. Like banks, trust systems become victims of their own successes. The more trust they accumulate, the greater the reward for a heist, so the harder attackers work, and the harder the systems have to work to defend themselves.



The second limitation is also paradoxical and results from the fences systems build in order to defend themselves. Trust systems usually work by focusing quite narrowly on the interactions that occur within their borders. These are easily tracked and analyzed by the system. And they are easy for users to refer to and understand. On eBay, for example, you can follow the trades in which a particular party has been involved. In Yahoo's discussions, if you want to check out people's credibility, you search among what they have recently posted and look at the biographies they have written about themselves.

Contrast this with the off-line world. We ask people to tell us about themselves. But to move beyond mere acquaintance, to rely on their checks or their advice, we usually take broader bearings. We don't expect to know everything about them. But we generally do expect them to be knowable. That is, we expect to be able to find out important things about them if need be. And we look around for corroboration. When friends, neighbors, or colleagues can't

vouch for someone, we rely on the bank behind the check, the Department of Motor Vehicles behind the license, the company behind the credit card, the reference behind the application, the school behind the degree. Given the challenge of controlling the world at large, con men inevitably try to narrow down triangulation, focusing attention on a particular set of documents or references. As noted, many trust systems do, too.

Take, for example, eBay's approach to reputation. Anyone who has worked with a particular buyer or seller on eBay can rate the experience. eBay compiles and ranks those ratings and makes them available to anyone using its site. The system inspires trust and consequently works quite well. But people who want to manipulate that trust can also use the closed world to their advantage. They can rely on a system's boundaries to help create a coherent picture that would lose coherence in a larger context.

You can see this in the case of the "Diebenkorn" painting that stirred up eBay watchers this past spring. The seller called himself "golfpoorly." He was, he said, a married man from Berkeley, which was where the artist Richard Diebenkorn had lived, though golfpoorly didn't add that. He made no claims about his picture, only saying that his wife wanted him to sell it and it was damaged. But in a photograph posted so people could see how much damage his son's tricycle had caused, the initials "RD" appeared. This photograph and the seller's description and reputation (and the buyer's desire to beat the system) prompted a Dutch software executive to bid \$135,805.

It turned out that picture, reputation, and biography were plausible fictions. Golfpoorly was childless, unmarried, and not even from Berkeley. He wasn't quite so naive about art as his account suggested, having sold several paintings online under different names. He may even have bolstered his online reputation by bidding, buying, and selling under different names. When tested in the world at large, the story failed to hang together.

Again it was the Net that helped triangulate the untrustworthiness of this deal. But not, importantly, the trust system alone. Beyond the borders of eBay's system, what Philip Roth calls the ineradicable stain of enduring human identity was harder to ▶ 65

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◀28 hide, a believable alternative harder to create. Online onlookers, lured by the wild bidding for an unsubstantiated painting, looked beyond for reliable triangulation. And soon the inconsistencies emerged. One art dealer (whose profession teaches a good deal about triangulation) discovered that golf-poorly was in fact a lawyer from Sacramento. Another learned that the man had previously auctioned work that, though unattributed, had signatures close to those of famous painters.

Eventually, confronted directly, the seller admitted that he had concocted the story that went with the Berkeley picture. In all, the closed system proved an inadequate indicator of truth in the broader social system, which shows why triangulation is necessary.

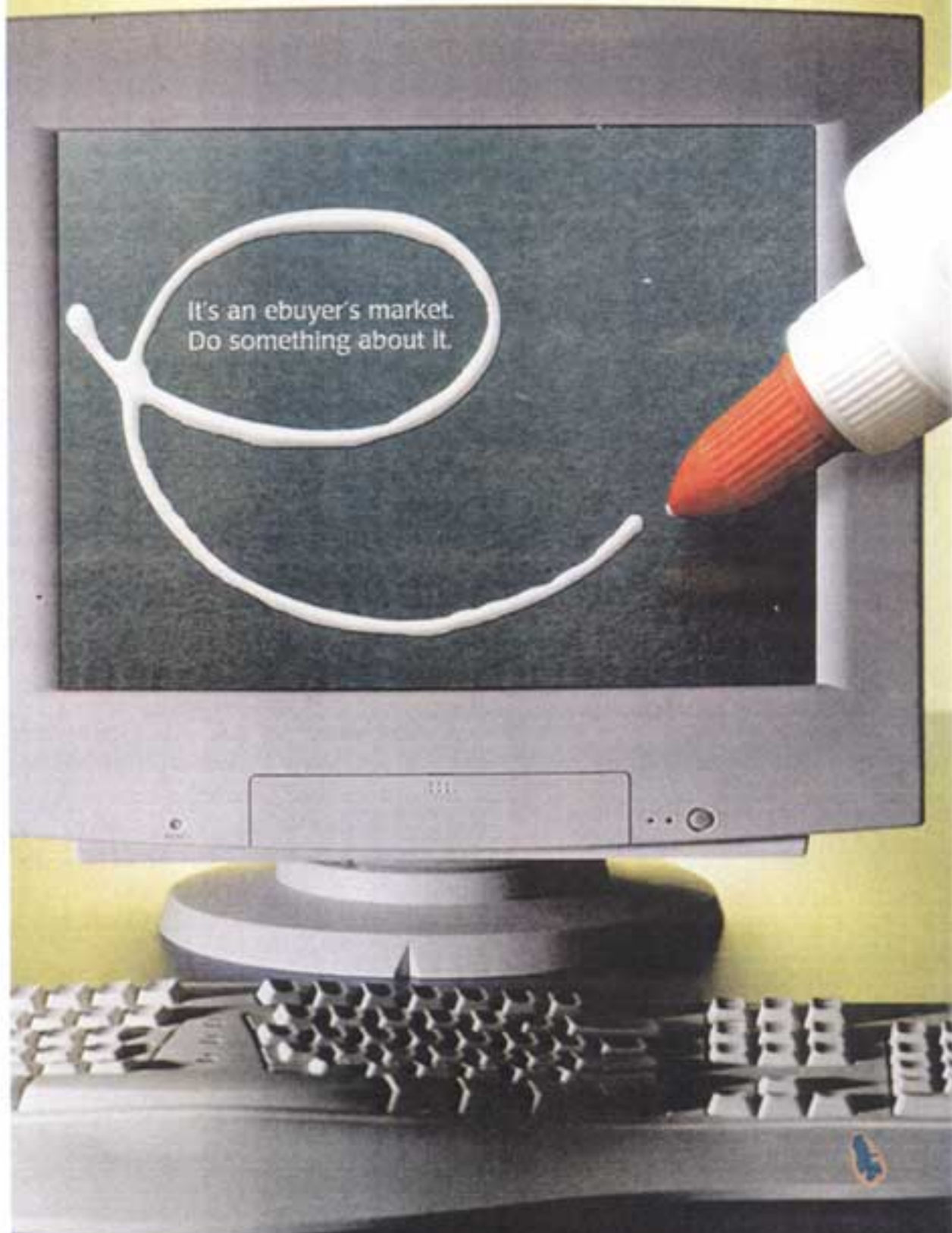
In short—or perhaps “in truth”—the old warning, caveat emptor, remains as important in Internet times as it ever was in Roman times. Perhaps it is more important, because it's so tempting to believe that technology will do the hard work of triangulation, trust, and truth for us, without those clumsy old institutions of knowability from the past. It won't. But, if we know how to read the information that the Net can provide against a larger background it can triangulate across, the Net does provide a powerful resource.

To deal with this new world, we probably do need to develop a new kind of literacy, or at least a new/old literacy. It needs to be new to deal with the Net, but it also needs to incorporate the old to deal with the complex social context that surrounds all Net transactions. The Net doesn't bring a world where truth and trust are no longer needed. And it doesn't bring one where the search for truth and trust can be handled automatically by technology. It brings a world where, much like the world before, we need to “trust, but verify,” to use an old phrase. “Trust, but triangulate” should be our new philosophy in the age of the Internet. ■

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