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p62

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Sun+ Water= Fuel

IF THIS CAN SCALE UP, WE HAVE CLEAN ENERGY
p56

PLUS

Dispatch from India: A Mobile Solution to Poverty
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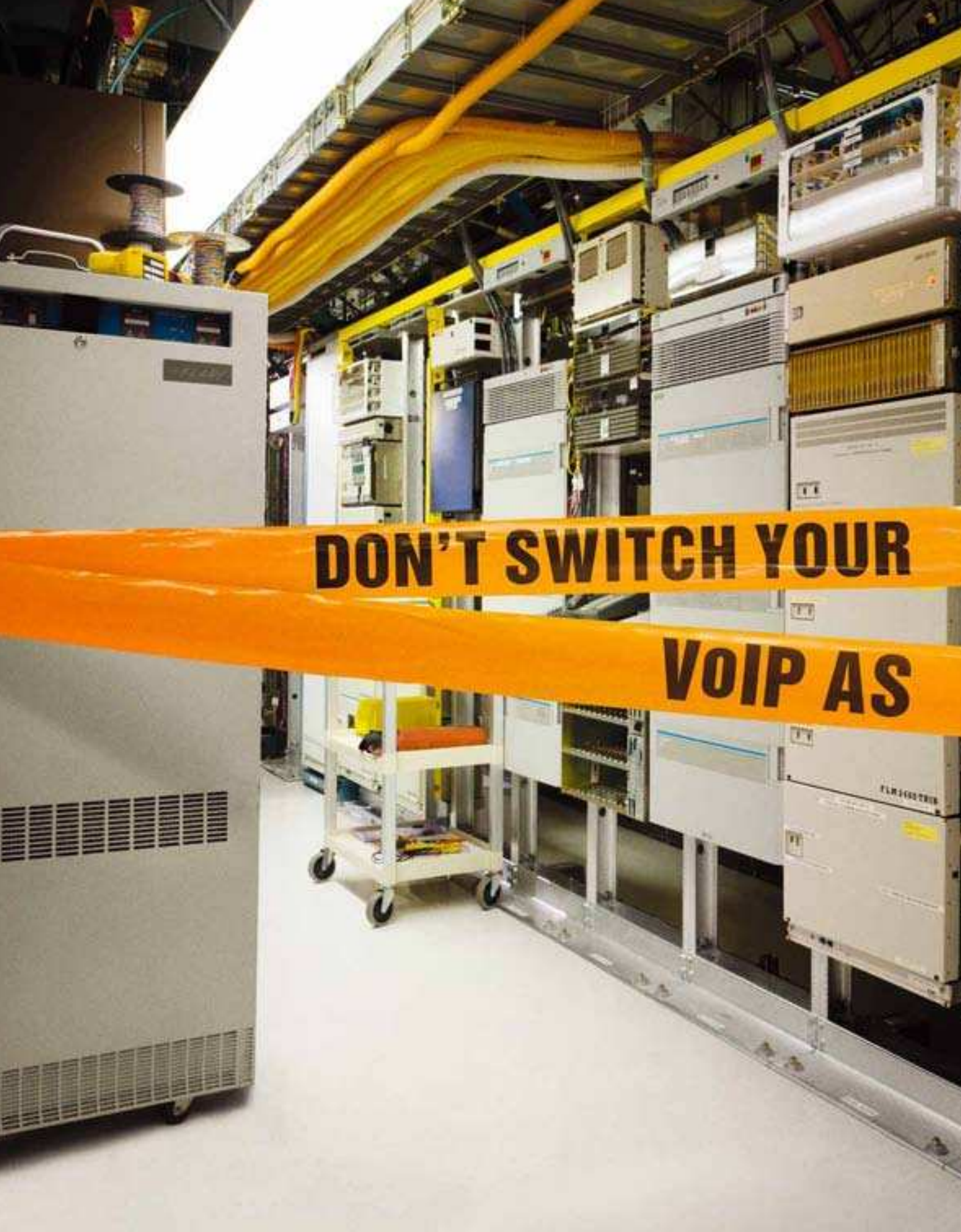
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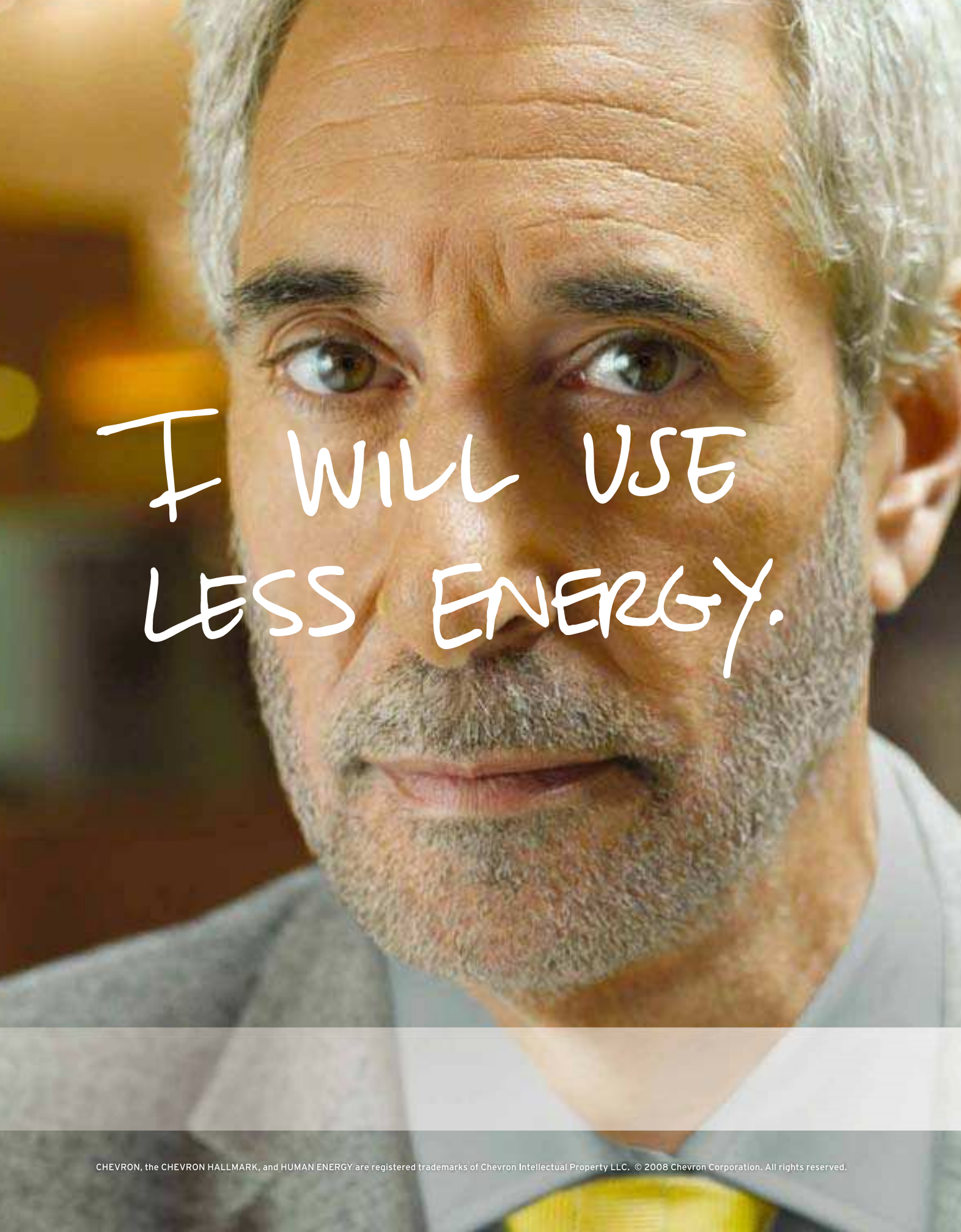

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KEVIN BULLIS, in this issue's cover story *("Sun + Water = Fuel," p. 56)*, reports on work by MIT's Daniel Nocera and others to unlock the potential of solar energy through artificial photosynthesis. "Solar power only works when the sun's out. If it's ever going to oust fossil fuels, we'll need a way to store the energy from sunlight cheaply, so we can use it after the sun sets," Bullis says. "Now chemists, by imitating the way plants store energy from the sun, may have found a way to do this, clearing the way for solar power that works day and night. The advance has ignited intense interest and controversy—making it a fascinating area to report on." Bullis is *Technology Review*'s energy editor.

GRAHAM ALLISON wrote this issue's essay on the prospect of nuclear terrorism *("Nuclear Deterrence in the Age of Nuclear Terrorism," p. 68)*. "By a combination of good sense, great fortune, and grace, we survived and protected both peace and freedom during the Cold War—without a nuclear Armageddon," says Allison. "The 21st century poses new threats that will require new thinking about unthinkables." This essay extends the argument in his 2004 book, *Nuclear Terrorism: The Ultimate Preventable*

Catastrophe, which was selected by the *New York Times* as one of the "100 most notable books of the year." Allison served as assistant secretary of defense in the first Clinton administration; he currently directs the Belfer Center for Science and International Affairs at Harvard's Kennedy School of Government, where he also teaches.

DARYL GREGORY, in his short story "Glass" *(p. 74)*, imagines a drug that can awaken empathy in those who lack it. "Psychopaths

are an interesting puzzle," says Gregory. "About 4 percent of the general population, and about 20 percent of the prison population, simply don't have a conscience. They don't feel remorse when they hurt someone, lie, or cheat. Most researchers think that the change is at the neurological level and that, quite simply, psychopaths are wired up differently from the rest of us. This raises ripe questions: what, exactly, is a conscience good for? And what would happen if you could switch it on and off?" Gregory's stories have appeared in *Asimov's Science Fiction*, *The Magazine of Fantasy and Science Fiction*, and several anthologies. His first novel, *Pandemonium*, was recently published.

MICHAEL RUBENSTEIN photographed portraits for David Talbot's feature about the Indian startup mChek, whose mobile-phone payment software could help provide banking services to the poor *("Upwardly Mobile," p. 48)*. Rubenstein, who used to live in New York, is now based in Mumbai, where he lives with his fiancée. He travels throughout South Asia photographing stories for clients; his work has appeared in many publications, including the *New York Times*, *Paris Match*, *Time*, and the *Wall Street Journal*.

POLITICAL COVER

Before even getting into my current issue of *Technology Review*, I am gravely disappointed to see an unmistakable signal of political favoritism. The cover of the September/October issue featuring Senator Barack Obama, the article on his campaign's Web strategy, and the profile of his economic advisor Austan Goolsbee combine to form a clear message: *Technology Review* is a liberal rag. I read further and now see that Obama is at "the brink of the presidency" and that he's "a new kind of presidential candidate." Posing as innocuous subheaders, these sound bites are consistent with Obama's campaign rhetoric. Such favoritism has no place in your magazine: it is inconsistent with your mission.

September/October '08

Ben Pember
Spartanburg, SC

Editor in chief Jason Pontin responds:
With great respect, *Technology Review* is neither liberal nor a rag. We are not political partisans. As for the stories to which you object, they were legitimate subjects for us: Senator Obama's campaign made novel use of emerging social technologies, and Austan Goolsbee is a technology-inspired, MIT-trained economist who made his name thinking about the Internet. Finally, whatever else the senator may be as I write these words in October, he is certainly at the brink of the presidency (he is, after all, the Democratic nominee), and he certainly is, for reasons such as his race, a new kind of candidate.

AUSTAN GOOLSBEE

I enjoyed reading Mark Williams's thoughtful portrait of Austan Goolsbee ("Obama's Geek Economist," September/October 2008), which was several cuts above typical profiles of "great" men. Austan is indeed skilled and has sensible economic priorities. The problem that any economist faces in the political arena is this: economics is fundamentally about balancing trade-offs among competing objectives (e.g., better schools vs. lower taxes), whereas U.S. political debate is largely about telling voters that there are no trade-offs. Mainstream economists believe in the virtue of free markets. Mainstream politicians appear to believe in free lunches—and their economic advisors adopt this view. Hence, the essential qualification for a presidential economic advisor should not be economic genius alone but also strength of character—a commitment to telling the president that we cannot get something for nothing. If Austan's resolve to speak truth to power is even roughly equal to his intellect, he will be an excellent advisor.

David Autor
Professor, MIT Department of Economics
Newton, MA

OBAMA'S SOCIAL NETWORK

As president of the Voter Genome Project, I was interested to read political strategist Joe Trippi's views on Barack Obama's campaign, as reported by David Talbot ("How He *Really* Did It," September/October 2008). In large part because of the technology-friendly nature of Obama's younger, better-educated supporters, his campaign used Web tools to gain an edge in fund-raising. However, we have seen little evidence that this effort pulled in voters who would not have voted for Obama otherwise. Furthermore, the focus on social-networking tools has contributed to a lack of concern for a national voter database that is failing badly.

Ron Turiello
Redwood City, CA

INNOVATOR OF THE YEAR

JB Straubel is a good pick for Innovator of the Year for his work on the electric Tesla Roadster ("The TR35," September/October 2008). Years ago, AC Propulsion wanted to hire JB, but business was down, so we couldn't. I recommended him to Tesla cofounder Martin Eberhard, and Martin had the good sense to hire him. We helped Tesla by lending it our lithium-ion-battery Tzero electric sports car and providing patents on motor and inverter designs. Tesla has since developed impressive engineering capability. After 16 years of developing electric vehicles and drive systems, AC Propulsion is doing well: we'll deliver more drive systems than Tesla this year. But JB's innovations could put Tesla ahead in 2009.

Tom Gage
President and CEO, AC Propulsion
Sunnyvale, CA

TECHNOLOGY IN THE OPERATING ROOM

Neurosurgeon Katrina Firlik's essay on the difficulty of overcoming the "fiddle factor" inherent in medical technology ("A Messy Art," July/August 2008) will be required reading at our company, a developer of intraoperative MRI systems. Out of concern for the safety of their patients, surgeons are often wary of new, unfamiliar tools and methods. For this reason, the medical-equipment industry must make sure its equipment features intuitive, easy-to-use interfaces.

Stephen G. Hushek
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