

ESSAY

Still



The Phone Companies Don't Get It

BY MARK GIMEIN

ONE DAY THIS SPRING in San Antonio, I sat on a couch to watch TV with two AT&T executives and three public-relations aides. It's not a bad job, sitting on a comfortable sofa in a pretty, air-conditioned brick Tudor watching TV, and the way I got it was by telling AT&T's PR folks that I was working on a story that could wind up saying that in this age of enormous technological upheaval, their very own behemoth was not adding to innovation but standing in its way. No, no, they said, that's all wrong. If only I could go down and see AT&T's new video technology in action. Some 200 participants in AT&T's test there were the first beneficiaries of the great new network war, the mega-telcos' drive into video. Come down to San Antonio, they said, we'll take you to a customer's house to show you.

The day before my trip to Texas, on my way back from a tour of AT&T's Florham Park (N.J.) labs, a PR guy had clarified that they didn't mean just any home. "Hundreds of reporters have asked to see this," he said, and they couldn't ask their test customers to take them all in. So the customer probably would be, while not an AT&T employee, someone with some connection to the company. "A friendly," the PR person had said.

When I get to Texas, however, still another PR person confides to me that, despite the many press requests, I will be only the second reporter to see the new video offering in action. You would think rounding up a bona fide customer for two reporters shouldn't be impossible, but the proud homeowner who meets me at the door is wearing brightly polished cap-toed oxfords and a blue button-down shirt, an odd outfit for a guy sitting around his own house waiting for a reporter to stop by. And so we make our greetings and I sit down in front of the TV. In the armchair next to me Jeff Weber, the AT&T vice-president in charge of Project Lightspeed, grabs the remote control. He presses a button. The channel changes (much faster, he

**They block
competition and
charge too much.
You call this a
communications
revolution?**

points out, than on a conventional cable system). He hits another button. It changes again.

He gives a little flourish and gestures to the set. "TV," he says. "It works."

I ask if this brand-new system will let me record one show while watching another, as TiVo or my own cable box at home do. Sure, says Weber, as soon as AT&T gets the new generation of set-top boxes built and delivered.

Meanwhile, the homeowner has remained standing, watching me watch TV. So I try to break the ice, asking what he does, assuming he doesn't work for AT&T. Actually, he corrects me, he does.

"So what exactly do you do?" I ask.

"I'm the architect of Project Lightspeed." For a few seconds I take this in, wondering why nobody bothered to tell me.

Baby Steps

IT'S A CLASSIC MOMENT, an illustration of where the power lies in telecom. It is tough—no, make that impossible—to think of another ostensibly technology-focused industry where the chief technical architect of a planned multibillion-dollar, company-changing project does not merit so much as an introduction. In fact, in San Antonio, that architect, John Kirby, neatly managed to dispel any confusion about the status of engineering at the company when, after clarifying what it is he does, he explained that when it came to big new projects, "marketing dreams it up, and then I have to design it."

Ah. Welcome to Telco Land, a strange country where the biggest players talk more and more about innovation yet approach new ideas with baby steps, build little themselves, and when they think about technology are apt to believe it's a threat they have to fight.

In case you haven't been keeping score, after the original phone company, American Telephone & Telegraph, was broken up in 1984, the country was left with eight major regional tel-

cos. Over the past decade these companies proceeded to gobble one another up. Now there are four: AT&T, Verizon, BellSouth, and Qwest. Just keeping track of the mergers and names is an endless challenge: The "new" AT&T is actually the rechristened SBC, based in Austin, Tex., which acquired the venerable name last year—and it's in the process of buying BellSouth. That will leave two phone giants, Verizon and AT&T, and the much smaller Qwest. The biggest wireless carriers are Verizon Wireless, majority owned by Verizon, and Cingular, which is soon to be wholly owned by AT&T. It's not exactly the return of the old Ma Bell monopoly—the world has gotten way too complicated for that—but that's a lot of power in the hands of just two companies.

One way in which these companies are very different from the old phone monopoly is that while the original AT&T had a world-class research operation, its successors don't. One of the signal facts of the communications revolution is that virtually all the new technologies that made it possible were developed outside the phone world. Last year, Verizon's revenue came in at nearly \$80 billion. AT&T (without BellSouth or Cingular) had revenue of \$44 billion. And yet while Intel Corp. spent \$5.1 billion last year on research and development, AT&T spent just \$130 million. The word "research" doesn't even appear in Verizon's annual report.

But if in the era of telecom deregulation the most common industry buzzword was "competition," it is now "innovation." And Verizon and AT&T increasingly are asking to be viewed as leaders in the realm of ideas. Do a Web search on "Verizon" and "innovation" and you'll pull up speeches by Verizon CEO Ivan G. Seidenberg extolling its importance. The phone giants have even used "innovation" as a key justification for their aggressive merger wave. Last year, when SBC was buying the remnants of AT&T, SBC Chief Executive Edward E. Whitacre made sure to note that by merging, the combined company would have "the intellectual and financial resources to spur innovation."

"We are the insurgents who are trying to come in and change the marketplace" says a Verizon lobbyist



Verizon and AT&T are under great pressure to recast themselves as innovators. They lag behind the cable companies in their efforts to sell high-speed Internet access. Their local telephone monopolies are under attack as those same cable companies' offer to provide phone service at lower rates along with TV and data. Looking ahead, wireless technologies ranging from the familiar Wi-Fi to more powerful wireless standards being advanced by researchers in academia and companies such as Intel pose a whole new set of threats.

In response, AT&T and Verizon are rushing to build networks to deliver TV service and high-speed broadband access. They point to them to make the case that, yes, they are technology companies. Verizon is spending billions to roll out a next-generation phone, data, and video network called FiOS (as in "fiber optic") to give its customers faster Internet service and an alternative to cable. While not matching FiOS' impressive

speeds, AT&T promises to do something similar with Light-speed, which it started marketing in parts of San Antonio under the brand name "U-verse" not long after my visit.

The rhetoric of the tech biz has always been about who can out-revolutionize whose revolution, and executives at AT&T and Verizon are embracing it. Says Thomas J. Tauke, a former Iowa congressman who is now Verizon's chief Washington lobbyist: "As we deploy new technology, what is happening is that we are the insurgents who are trying to come in and change the marketplace."

To give Verizon its due, the company has made some major strides. Its FiOS broadband and video network is by most accounts the state of the art in network technology. (It's pricey, though—the highest level of FiOS home broadband service costs \$109 to \$139 a month.)

But dissonant realities remain. Isn't it a little odd, for example, to hear the CEO of a company the size of AT&T talk about needing to get bigger to have the resources to innovate? In fact, over the past decade the big telcos have mostly looked outside for technological innovation. "We develop services, and we figure out how to use and deploy technology that many others are developing," says Verizon's Tauke. Edmond J. Thomas, who ran the labs at Verizon when it was Bell Atlantic, puts it another way. "They do very little fundamental research and very little advanced development," he says. "Their view

Things Could Be **So Much Better**

WHAT'S TECHNICALLY POSSIBLE

- More powerful Wi-Fi-like networks on lower frequencies, open to anyone with a transmitter
- High-speed data access, open to any new service
- Cell phones that can interact wirelessly with your computer to send pictures, address books, or files
- Cheap, ubiquitous wireless access in places with citywide networks
- TV programming from telcos that competes with cable

WHAT THE TELCOS HAVE IN MIND

- Expensive 3G data services on networks owned by the phone companies
- High-speed data access that providers of new video services will pay the phone companies to use
- Phones with crippled features that send data only over the carriers' own networks
- Service to the home from cable and telcos, and wireless service at Starbucks and the like
- TV programming from telcos that competes with cable (yes, they have this one right)

of the world is: We can buy it elsewhere."

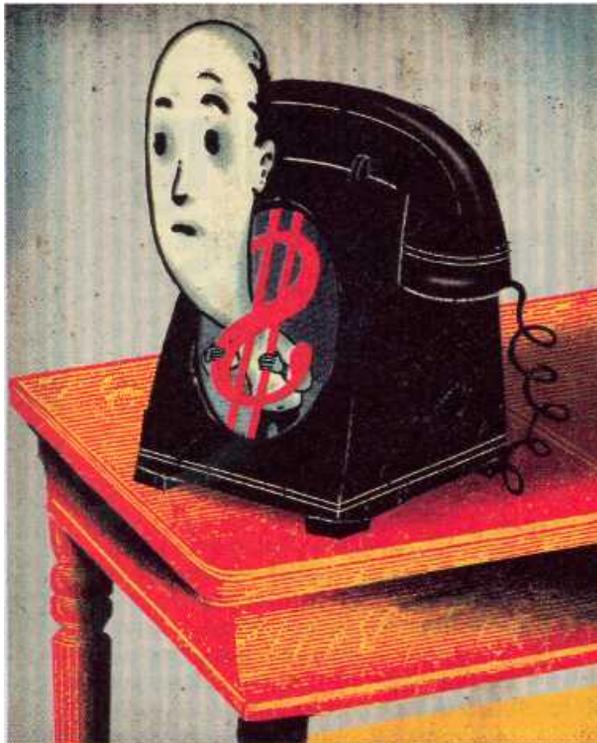
There is something to be said for "buying it elsewhere." If the big telcos built everything themselves, there would be no Cisco and no Motorola. But years of buying it elsewhere has yielded a culture distrustful of technology—and of progress: It's impossible to imagine Microsoft developing a big new product and having the lead engineer shift from foot to foot in the corner pretending to be just another customer. It has meant, as with AT&T's Lightspeed, that telcos are likely to offer services that only match, but not surpass, those available from others. And increasingly their approach has put the telcos on the wrong side of technological innovation, leaving them in the position of protecting their investments in their networks from the encroachments of new ideas.

To some extent, Verizon and AT&T have been forced to take innovation seriously and move into offering TV and improved broadband. A world in which big telcos competed with big cable companies was something envisioned as far back as the 1996 Telecom Act. It only became a reality when Internet-based phone services allowed cable companies to offer the dreaded "triple play" of television, broadband, and phone, putting AT&T and Verizon on the defensive. But even as they've pushed into this new area, in others the telcos' instinctual response has also been to fight new technologies rather than foster them.

Throwing Sand in the Gears

THAT'S WHAT HAPPENED in the skirmish over "municipal WiFi"—the effort by cities such as San Francisco and Philadelphia to offer citywide wireless services that AT&T and Verizon fought (a struggle Verizon has largely abandoned but AT&T is still pursuing). It's evident in battles that are just starting on Capitol Hill over emerging technologies, such as a proposal to open the empty space between TV channels to powerful WiFi-like services that would pose a serious threat to the telcos' \$60- to \$80-a-month wireless broadband businesses. And you can see it in less technologically sexy areas as well: Verizon crippling features on its phones that would let users send photos or games to and from their computers without paying Verizon, or AT&T's yearlong foot-dragging in giving Internet phone competitor Vonage access to its 911 switches.

But fighting innovation is just a stopgap. The giant telcos have been in the driver's seat when it comes to communications technologies because of their sheer size. "Our motto," says CEO Paul E. Jacobs of Qualcomm Inc., which develops many of the chips and technologies that make cell phones work, "is love the



Tech companies worry that the telcos will try to extract greater tolls for the use of their networks

carriers. We know which side our bread is buttered on." Increasingly, though, the telcos are not the only game in town. And with competition gearing up, getting serious about innovation increasingly becomes a necessity, not just words.

Will the telcos use their positions to bring more new ideas to consumers? For years technologists have talked about the possibilities opened up by combining television and high-speed Internet. But neither Verizon nor AT&T take advantage of that. Talk to them about what's next, and both companies bring up the possibility of providing weather and sports scores in a box on the TV screen. Not exactly radical. But it's what you'd expect from companies that are afraid of new technology.

That paucity of new ideas has led critics to think the telcos see their future not in developing better services but in extracting greater and greater tolls from anyone who wants to use their networks. Over the last few months AT&T in particular has managed to scare the heck out of technology companies by talking about charging Internet content providers such as Google Inc. or

YouTube for access to the customers on its new network. That's a logical plan for a company like AT&T, but it's probably not one that can be sustained forever.

There's another strategy the telcos could consider. In San Antonio, AT&T tried very hard to sell me on the virtues of Project Lightspeed. But the most impressive thing you're likely to see in AT&T's labs might be a feature of Homezone. Lightspeed's less ballyhooed sibling, Homezone is a simpler video and Internet system that combines satellite TV with a DSL line. One feature of the set-top box AT&T has developed for Homezone is the ability to get music files easily from a PC and play them on a television or home entertainment system. It was the one time during my visit that I thought: "Wow, I'd like to have this at home." Homezone demands no expensive new network infrastructure and no partnership in which companies pay AT&T for exclusive access. It's proof that a simple new idea can grow inside a giant telco. It's a hint of what AT&T might achieve if it spent on research and development even half of what a company like Intel does. But it may not be a hint the telcos are ready to take.

Dial into the Debate

Big Idea Read more about the push to open up unused spectrum between TV channels to deliver powerful new wireless services

Verizon's View In a Q&A, its Washington lobbyist begs to differ

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