The killer app of tomorrow, says futurist Howard Rheingold, will not be hardware or software but something he has dubbed "smart mobs"

My quest led me into every hallway and alleyway of tech. I tracked down entrepreneurs in mansions, cubicles, and garages, flew to Microsoft's gleaming research labs in Redmond, Wash., and probed visionaries coast to coast. In all, I talked to more than 100 people and heard dozens more at industry gatherings. My journey went from the ridiculous to the sublime: One morning, I watched a startup pitch a high-tech contraption to make fertilizer from cow chips. That afternoon, I visited Xerox' legendary Palo Alto Research Center (PARC) and saw computer chips whose microscopic circuits were literally printed using inkjet printers—a breakthrough that could produce disposable cell phones or ultracheap PCs.

Did I find the Next Big Thing? Truth be told, not exactly. But maybe, just maybe, I unearthed some trends that seem likely to produce something big. It will spring, I believe, from the proliferation of single-chip computers, tiny sensors, ubiquitous Internet connections, and even new tech-driven social movements envisioned by futurist Howard Rheingold. Together, they're forming a global digital nervous system whose potential impact seems almost limitless.

Regardless of whether all of that produces a blockbuster product or service anytime soon, my journey itself was the real reward. Sure, it was meandering, often leading down blind alleys. But it shed light on the process of tech innovation and exploded a lot of myths. For one, I discovered that many venture capitalists aren't so much visionary risk takers as sheep in wolves' clothing. No one else can so quickly build on a trend, and so quickly abandon it—leaving behind mass bankruptcies, layoffs, and a dearth of money for new startups.

I also learned that even the whizziest technology takes a long time to seep into our lives. GO's handheld computer went nowhere in the early 1990s, for instance, creating one of the Valley's biggest implosions. Yet only a few years later, Palm had a winner, and mobile digital devices of all kinds are among the hottest tech products today. In tech, says Paul Saffo, director of the think tank Institute for the Future, "it takes 20 years to become an overnight success."

Above all, I was struck by how many people at every stage in the tech development process, from entrepreneurs and researchers to the best VCs and savviest customers, are diving into the fray again. The spirit of innovation lives.

TOUGH TIMES FOR ENTREPRENEURS

One bright late winter morning last year, I start my search at what seems just the right place: startup incubator Stanford University and its annual Conference on Entrepreneurship. Some 300 students and young startup-wannabes have come to network and attend panels on what's hot and how to raise money. But the real lesson begins after lunch. The keynote speaker is Nolan Bushnell. He's the *über*-entrepreneur who founded video-game pioneer Atari and Chuck E. Cheese's Pizza Time Theater in the 1970s, plus nearly 20 other startups since. "Venture capitalists are people looking for innovation—until they see it," he thunders. "If you have an innovative idea, your chance of getting funding is virtually zero."

Cranky as he is, Bushnell has a point. Great ideas often look trivial to most people. In fact, Harvard Business School Professor Clayton Christensen has noted this pattern among many great technologies. The chip, for instance, started out suitable to run only lowly digital watches but eventually revolutionized all of electronics. Still, Bushnell's latest venture—kiosks for barflies to play online games—seems an especially unlikely spark for a revolution. Anyway, I'm looking for less jaded entrepreneurs.

That's why, a few weeks later, I'm at The Gong Show. Hosted at a Palo Alto hotel by the entrepreneur support group Asia-Silicon Valley Connection, the event lets 12 pre-screened startups give presentations to a panel of investors—two minutes sharp, or a gong rings them off the podium. A couple, including a firm whose technology speeds drug discovery, look promising. The rest deserve (but don't get) an early gong. Lawyer Bob Kohn pitches Laugh.com, which aims to get cell-phone subscribers to pay a buck a month for George Carlin's recorded joke of the day. Isn't cell-phone service enough of a joke already?

Like the lottery player who hopes the next ticket will be a winner, I keep attending these dog-and-pony shows over the next few months. But I can't find a pony among the dogs.

INNOVATION INSIDE

It's time to go to the well: the scientists and researchers. Their ideas, after all, are the fount of innovation. AT&T's Bell Labs invented the tran-
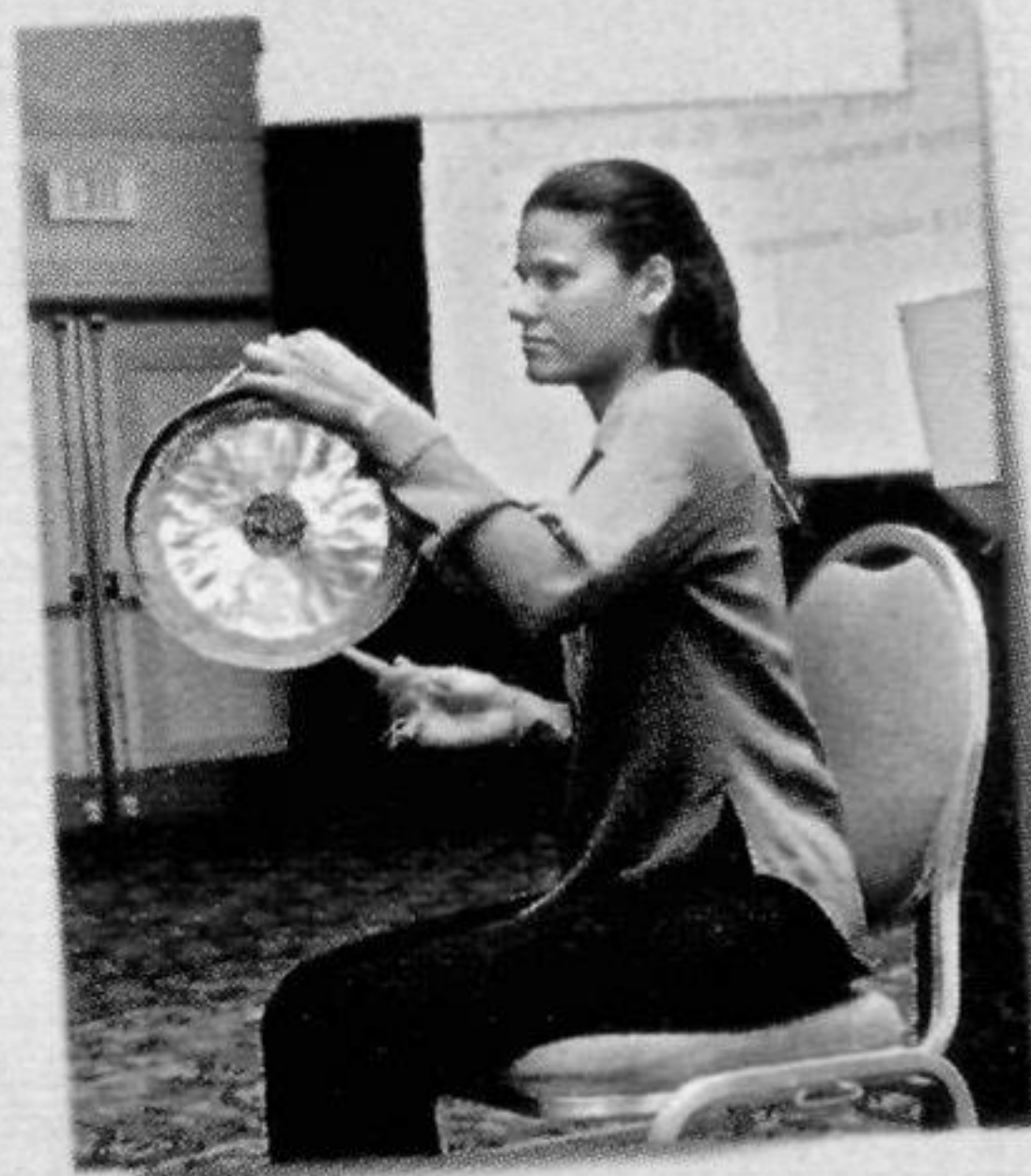
The entries at the entrepreneur showcase The Gong Show included a joke-of-the-day for cell phones. But isn't cell-phone service enough of a joke?