

Boston Business Journal - May 1, 2006

<http://boston.bizjournals.com/boston/stories/2006/05/01/focus1.html>

# **Boston Business Journal**

**Business Pulse Survey:** [Given the high cost of energy, is the state doing enough to encourage alternative sources? Why?](#)

## **Inspecting gadgets**

We look at a few of the gizmos that developers hope will be the next must-have tech contraptions

Boston Business Journal - April 28, 2006

by [Steven P. Galante](#)

Journal Staff

Thanks to technologists, a motion picture intended to be shown on a 50-foot cinema screen can now be watched on an iPod viewer the size of a belt buckle.

It didn't take long before some other technologists noticed that something gets lost in such an extreme translation: namely, the ability to see very much. So, they're devising alternatives -- like the space-age "heads-up" eyewear that 18-year-old Sarah Lampert dons when doing household chores.

The black-and-silver goggles, plugged into Lampert's iPod, project the image of a video screen that only she can see, seemingly into the air. Moreover, the headset is so thin -- barely the thickness of a finger -- that Lampert can walk around comfortably even as she views a popular teen soap opera.

"Like, if I'm cleaning my room, I'll be watching 'South of Nowhere,' " she says. "It is so cool. I feel like I'm from 'Mission Impossible.' "

Lampert is getting an early look at a video gadget called the "myvu personal media viewer." When it goes on sale this summer, the myvu will be among the latest products angling for the

pocketbooks of consumer and business users who have grown enamored of owning the latest in microelectronics wizardry.

Indeed, in tech labs, marketing suites and venture capital offices on at least three continents, a race is underway to identify the next whiz-bang gizmos. Some products, like the myvu viewer, will arrive this year. Some are a year or two off. And other endeavors, such as devices for making in-coming cell phone calls less irksome, are still in the tinkering stage at technology think tanks -- the MIT Media Lab, for example.

The myvu viewer grew out of military research at Westwood-based [MicroOptical Corp.](#), where Lampert's father, Bruce Lampert, is vice president of sales.

The company, which would not disclose funding information, developed its heads-up display initially to give tank drivers a more natural experience when maneuvering in the dark, or through smoke or fog.

But, says MicroOptical CEO Mark Spitzer, "the 'killer app' for us right now is portable video." Though the myvu viewer won't come cheaply at the anticipated retail price of \$269, Spitzer expects demand will be strong.

"In the next couple of years," he says, "video is going to start emerging from your cell phone -- TV shows, films, short videos. People need a good way to watch it. And handheld viewing on a small screen just doesn't do it."

Russell J. Wilcox states the case another way. The president and CEO of [E Ink Corp.](#) of Cambridge, Wilcox notes that the price of bandwidth is plummeting as service providers install massive capacity.

"You're going to be able to pull rich media out of the air almost everywhere," he says. "If you have a cell phone, you'll have the full sum of human knowledge in the palm of your hand.

"The problem," he adds wryly, "is that viewing the sum of human knowledge on a 2 1/2-inch screen is not very satisfying."

E Ink -- which since 1997 has raised over \$120 million in funding -- has spent the past nine

years developing a thin, high-resolution imaging film intended to replace paper-based books, newspapers and other printed material. Now, Wilcox says, the technology is ready for those tasks -- and much more.

Starting this summer, beach-goers who want to bring along a good book can carry the equivalent of more than a dozen novels in a slim, paperback-sized device called the Sony Reader, which will retail for between \$300 and \$400.

E Ink's technology gives the 6-inch Reader screen a realistic print look that can be read comfortably even in bright sunlight. In fact, the Reader comes so close to emulating a conventional book that [Borders Inc.](#) plans to sell the device in its bookstores.

Later this year, E Ink's technology will turn up in a black-and-white computer monitor "the same weight and size as a pad of paper," Wilcox says. A full-color version is to follow in 2007. Within two years, he says, an extremely thin flexible display-approaching the long-anticipated electronic newspaper-will hit the stands.

There will, of course, be other viewing options. A Cambridge, England-based company named [Light Blue Optics Ltd.](#) has developed a portable laser projector no bigger than a matchbox that can plug into a cell phone, laptop or similar device.

"We expect more demand from entertainment applications than from business uses," says Amy Mokady, vice president of sales and marketing. "For example, imagine a group of friends looking at photos projected onto the table, or watching a video while riding on the train."

Mokady says the first laser projectors using Light Blue Optics technology should be on the market within two years. Jonathan T. Foote, a West Coast technology researcher, predicts the devices will become "omnipresent" because of their small size and razor-sharp resolution.

Foote is also intrigued by an emerging display technology called organic light-emitting diodes. "You squirt it out of a tube and wire it up," he says. "You can silk-screen it on a shirt, on the wall, in a stairwell. The potential is to see displays everywhere."

Researchers such as Foote are tinkering with devices that today seem arcane but one day could

prove useful. Recently, for example, Foote developed a prototype "videobot" for [Fuji Xerox Co.](#) that could sit in for a participant in a teleconference.

While such a device might seem esoteric, a tool that could make cell-phone calls less intrusive has obvious appeal. That's one of the ideas Chris Schmandt is working on as director of the speech interface group at the MIT Media Lab.

"The problem is that people hate the telephone," Schmandt says. "Any number of studies show that. ... They don't hate it because they use it. They hate it because other people use it."

In particular, people dislike calls that interrupt meetings and conversations. So Schmandt and his students are working on devices that would intercept calls, evaluate their importance, and then subtly signal whether or not the call is urgent.

For an early version, dubbed the Cellular Squirrel, a student named Stefan J.W. Marti replaced a toy squirrel's stuffing with animatronic innards. When an important call arrived, the squirrel gestured or tried to make eye contact with the phone's owner, much as a human assistant might. A grinning toy monkey serves the same purpose.

The aim, Schmandt says, is to "make interruptions more graceful." And that's what occurred when his students tested the gadget on unsuspecting visitors, Schmandt says: "When the phone started ringing, people shut up. When the squirrel started fidgeting, people finished their thoughts."

As useful as such a device might be, however, Marti himself says society might not be ready for his Cellular Squirrel. Aside from some remaining technical obstacles, he says, "it may just take some time until not only children but also grown-ups will not feel silly walking around with a semialive life form on their shoulder."

[Send us your comments](#) [More Latest News](#) →

---

*All contents of this site © American City Business Journals Inc. All rights reserved.*