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AN EDITOR'S NOTE

## A chip on my shoulder

**T**ECHNOLOGY is not solely to blame for the erosion of privacy in this nation. Government and businesses have been trying to keep track of you and your habits since the days of the quill pen.

But the ability to blend vast databases containing personal information - and the sophistication of tracking devices that can announce your presence along with myriad vital statistics when you cross a bridge or enter a room - have brought Americans to a crossroads.

Do we shrug and concede that privacy is lost - "get over it," as one titan of tech declared so bluntly? Or do we look for ways to draw the line, to identify means and places where employers and governments should not dare to tread?

One such place: Our bodies.

Life has begun to imitate art - as in the futuristic film "Minority Report" - with the refinement of toothpick-thick microchips that can be implanted in your arm and packed with loads of personally identifiable information that can be beamed to the world.

These radio-frequency identification (RFID) devices - or "talking bar codes" - amount to miniature antennas that transmit the types of

information that might otherwise be held on a swipe card.

Even if you've shrugged through the debates about warrantless wiretapping and said "what the heck" at the prospect that everything from your spending habits to your Web site travels are being compiled and crunched for commercial purposes, you might think twice about letting your employer insert a microchip under your skin as a condition of getting a job.

As of today, it is both a technical and a legal possibility.

Just last year, a Cincinnati-based provider of video-surveillance equipment inserted glass-encapsulated microchips into the arms of two employees to increase the level of security to the company's datacenter.

Those two workers volunteered, but it's not hard to imagine the lightbulbs going off in Corporate America. Is Joe really making a sales call or is he taking in a baseball game at AT&T Park? How many smoke breaks is Mary taking?

Amazingly, there is no California law against "chipping" workers as a



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condition of employment. Even more incredible - outrageous, really - is the resistance state Sen. Joe Simitian, D-Palo Alto, has encountered in trying to pass legislation (SB362) that would prevent an employer or anyone else, including government, from coercing an individual to accept a microchip implant.

Simitian's bill cleared the Senate on a 25-11 vote, despite continued apprehensions from the American Electronics Association, which fears that even this most reasonable checkpoint on RFIDs might somehow "demonize" the technology. The industry group has remained neutral on SB362.

As with any technology, an RFID implant can be used for good or ill. RFID chips have become the ticket to access in VIP lounges in certain trendy clubs from Barcelona, Spain, to Miami Beach. A patron can even buy a round

of drinks without having to even roll up his sleeves, let alone reach for his wallet. What Simitian is trying to do is ensure that it is voluntary and subjected to basic privacy safeguards.

Some folks may enjoy the convenience or perhaps the status of having an embedded microchip that whisks them through lines. But the ease of the "chipped" is accompanied by a potential for abuse by the "chippers" - companies or governments that want to keep track of people. The technology has not yet reached the point where it can pinpoint an individual's precise location in real time, but that day is coming.

The issue is preservation of choice.

"I may not think my house is going to be robbed when I leave in the morning, but I lock the door anyway," Simitian said. "I want the option to lock the door."

While nothing is as intrusive as an implant, some of the same principles about privacy and potential misuse apply to RFID in other forms. Simitian is also pushing sensible

legislation to restrict the use of RFIDs in driver's licenses, student cards and other government-issued badges until better privacy-protection standards can be developed.

One of the concerns with such implants is that the information could be cloned - or "spoofed" - by someone with a receiver and malicious intent.

Microchips have plenty of beneficial purposes in society. They can get you through the toll plaza without braking, they can help locate your lost dog, they can speed you through the checkout line with a "contactless" credit card.

This isn't about "demonizing" a technology. It's about using it judiciously. The microchip in your arm -- unlike the toll transmitter on your windshield or the credit card in your wallet -- can't be put away in a vault or tossed out easily. It's there, radiating your identity and perhaps much more, for 10-15 years unless you have it removed at great pain and expense -- assuming your government or employer allows you to do so.

*John Diaz is the Chronicle's editorial page editor.*

# InformationWeek

BUSINESS INNOVATION POWERED BY TECHNOLOGY

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## California Bans Forced RFID Implants For Humans

A California state senator criticized the RFID industry for being AWOL on the issue and says it should have supported the legislation.

By K.C. Jones

California has enacted a law banning mandatory RFID implants for people.

The bill, signed by Gov. Arnold Schwarzenegger, prohibits employers and others from requiring people to get radio frequency identification tags. It takes effect in January. Wisconsin and North Dakota also have banned forced RFID implantation in humans.

"RFID technology is not in and of itself the issue," said California Sen. Joe Simitian, who introduced the bill. "RFID is a minor miracle, with all sorts of good uses. But we cannot and should not condone forced 'tagging' of humans. It's the ultimate invasion of privacy."

In a statement, Simitian criticized the RFID industry, saying it should have supported the bill on the basis of "enlightened self-interest" and that its silence on the issue is "unforgettable and regrettable."

"While we're having a robust debate about the privacy concerns associated with the use of RFID in government identity documents, at the very least, we should be able to agree that the forced implanting of under-the-skin technology into human beings is just plain wrong," he said. "I'm deeply concerned that the folks who make and market RFID technology were 'AWOL' on this issue."

VeriChip Corp., which gained government approval for human implantation in 2004, reports that 2,000 people have RFID implants. Last year, a Cincinnati video surveillance company required employees who work in its secure data center to be implanted with RFID tags.

"This may sound Orwellian, but it's real, and it just makes sense to address it now," Simitian said. "We can't have employers requiring their workforce to get 'tagged.' There are other ways to secure a company's physical and intellectual property -- it certainly shouldn't be at the expense of a person's right to privacy."

The Council on Ethical and Judicial Affairs, which develops policies for the American Medical Association, recently issued a report that found RFID devices can compromise privacy and security because there is no guarantee the information can be protected. It also found that RFID tagging may present physical risks because the tags could travel under the skin and be difficult to remove.

Simitian predicted continued public resistance to emerging technologies unless those creating and marketing them respond to legitimate privacy and security concerns.