Zero Privacy

ALMOST A DECADE AGO Scott McNealy, chairman and cofounder of Sun Microsystems, famously told reporters, "you have zero privacy anyway. Get over it."

Maybe McNealy wishes he hadn't said that, or at least that people like me wouldn't keep bringing it up. When you're famous, reporters tend to write down random things you say, and sometimes they don't come out quite right. Of course, McNealy had a point, and if there was little privacy at the end of 1998, there is even less of it today. Technology has only one direction—toward more power and capability—and it goes that way no matter whose interests are injured. It is up to society to adapt to the inevitable changes that are wrought. The problem is usually that society and technology run on different clocks.

In the past decade, camera phones have proliferated, GPS has become ubiquitous, sensor networks have become a popular research topic, the skies have filled with drones that have all-seeing eyes, and RFID tags have been attached to our cars and other big-ticket products. Now researchers are developing microbots with embedded cameras and sensors.

Not only can electronic systems collect far more information than they could 10 years ago, but they can put it all together in new ways. Memory has gotten much cheaper, processing capability has increased by a factor of about 64, and the algorithms for data mining and social-network analysis have become much better.

Information leakage from one domain to another exacerbates the problem. Every time some online merchant tells me that "other people who bought what you bought also bought such and such," I'm reminded that the merchant is making inferences about me based on my apparent membership in a particular group of people. This is, of course, a simple example, but there is great power in the analysis of networks of apparent or induced connections.

On top of all this new technology are the social trends based on it, as illustrated by the meteoric rise of Facebook, MySpace, and YouTube. Although there are many clear ways in which these technologies and social trends have weakened privacy, it would seem that there are no ways in which they have strengthened it.

Furthermore, technological attempts specifically designed to protect privacy have been unsuccessful. While encryption techniques have been a celebrated theoretical achievement, they have not proved to be a social panacea. Digital-rights-management technology is a model that could be applied in the privacy domain, but so far it has not achieved wide market acceptance.

The argument about privacy seems to have two polarized extremes with a vast, indifferent middle ground. Almost all my engineering friends appear to be in that middle ground, saying that they would gladly give all their private information to the government in return for saving 10 minutes in airport security lines. They seem to reason that since their privacy isn't worth anything, these 10 minutes of their life will be restored to them at no cost every time they fly.

At one extreme there is a group of pioneers, or exhibitionists (take your choice), who flout their state of virtual zero privacy, putting their entire life on the Net for all to see. A small group of self-styled "cyborgs" view the world continuously through head-mounted, networked cameras. A larger group of people install webcams that broadcast their everyday life at home, while still others put all their "life bits" on their Web sites. I sometimes wonder who watches all this stuff, but incredibly, there seems to be quite a number of voyeurs who would rather watch someone else's life than live their own.

At the other extreme stands a group of passionate civil libertarians who view the rise of Big Brother capabilities as a dire threat to humanity. They maintain that there should be laws prohibiting the government from collecting or processing social information. In their defense, it should be said that historical examples of government abuses are not encouraging.

So there is quite a dilemma. Is the privacy genie out of the bottle? What should we do about it? Alas, no one seems to have the answer.

Maybe McNealy was on to something after all. ❑

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