INNOVATION AND TECHNOLOGY

The coming biometrics revolution

Embracing new technologies designed to identify and protect users

How do you prove to a computer or a website who you are?

The most common method today is to enter a password. But we know that that password could have been stolen and entered by a hacker, identity thief or some other unauthorized person. In the non-virtual world, it's easy to prove who you are to your spouse or significant other, since they already know you based on their intimate knowledge of your physical characteristics and behaviors. Simply put, biometrics enables computers to recognize its users much as your wife, son or best friend would.

Biometrics is defined as "automated methods for identifying someone based on their physical characteristics or how they act." Though the technology has been around for decades, biometrics has only recently reached a high profile due to its depiction in sci-fi movies. It's also increasingly being used by some government agencies.

Biometric methods include the cybernetic equivalents of what a human would use to recognize other humans, including one's face, handshake and voice. Biometrics also recognizes minute characteristics, including the unique shape of one's iris and retina, how one walks and even one's signature. However, digital fingerprints are by far the most common biometric method.

Since the Sept. 11 terrorist attacks, the U.S. government's interest in biometrics has increased substantially. The U.S. Dept. of Homeland Security has four major programs, including REAL ID, a program designed to improve driver's licenses and other identifying documents. Biometrics is not yet part of REAL ID, but there are proposals to add it in the future.

Another program, US-VISIT, already requires all visitors to the U.S. to be digitally fingerprinted and photographed, whether they enter by land, sea or air.

Other security programs which may look to biometrics in the future include the Transportation Worker Identification Credential (TWIC) and the Registered Traveler program, administered by the Transportation Safety Administration. This is the program that has been most in the news. Remember those long lines at the airport, with the occasional 80-year-old grandmother pulled aside for inspections by the TSA? Using biometrics, Registered Travelers would have a secure form of identification based on iris scans and fingerprints, allowing them to bypass long lines.

Here in Vancouver, Identity International, Inc. is on the forefront of the biometrics revolution. The company has developed systems for the collection and digitization of fingerprints, as well as access control. Its market continues to grow as governments worldwide implement biometric applications to secure their borders and combat the threat of terrorism.

Remember, as you travel or spend time in public areas, it is not Big Brother that will be watching. Rather it's a "big information system" that will be keeping you safe.

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