

# For a Chicago agency suspicious of its staff, the eyes have it

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"Don't pay 'em until you see the whites of their eyes." That could become the new slogan at the Chicago Housing Authority.

The agency's new management team wants to keep a close watch on the attendance and productivity of its 2,000 employees by having them "punch in" and "punch out" by using their eyes.

The reason? Eyes are like fingerprints; the blood-vessel pattern of the eye is one of a kind, sort of a "signature" that cannot be copied — even by an identical twin.

If Chicago gets the approval from the US Department of Housing and Urban Development, it will spend about \$450,000 on a sophisticated system that will require everyone from maintenance staff and carpenters to security officers and managers to "peer in" and "peer out."

Each employee will look into a desktop machine and focus on a small dot of light that has the intensity of a refrigerator bulb and then press a button which "sees" the right eye, specifically the retina's blood vessel pattern.

The image of the 30 to 40 blood vessels is compared against another pattern stored in the system and if they match, the machine records the time, date and location and the employee is in effect



A man has his identity checked by a retina-scanning device.

punched in. The entire process takes about two seconds.

Why does the Chicago authority need such a high-tech timeclock?

"We've been looking for an account-

ability system for the employees working in the field," said Katie Kelly, the authority's external affairs director. "We want to get a day's work for a day's pay and we have had reports of personnel and materials leaving the site earlier than they should have. Residents complain about not getting maintenance work done."

A major problem is workers who enlist others as "stand-ins," said Kelly, who acknowledged that the low employee morale is also a result of the agency's turbulent history of mismanagement, neglect and lack of stable funding.

Using high technology to tell people apart and then keep tabs on them has Orwellian overtones; Big Brother may not be watching, but he knows where you are at all times. That is different from using the technology as a security protection, notably to limit access to nuclear power plants, bank vaults, research laboratories and computer rooms.

Fingerprinting and eye-scanning systems are beginning to replace sign-up sheets, punch clocks, electronic badge readers and card keys, some with personal identification numbers that are tapped into an electronic combination lock to open and close doors or to gain access to computer files.

Glenn Fowler, president of Indentix Inc., a Sunnyvale, Calif., developer of fingerprint identification systems, said that the recent virus that infected more than

6,000 computers might have been avoided if "a biometric system was used."

Biometrics is the use of unique physical characteristics to provide positive personal identification. That includes various handprints, voiceprints and, more recently, eye-scanning devices.

Hands, voice and eyes do not change with age and are unaffected by weather, according to developers of such equipment. Some criminals, however, have figured out that using high-stick glue can make fingerprinting difficult, and that finger burns do change print patterns.

In addition, some handprint systems can be fooled, said George Maulsby, managing director of reliability management at American Airlines' Sabre Computer Services division in Tulsa, Okla.

### Unreliable system

"The hand geometry system just wasn't that reliable," Maulsby said. "And fingerprint systems are just too slow."

That same reasoning prompted the Chicago Housing Authority to turn to biometrics in an attempt to solve their accountability problems. Their search led to EyeIdentify Inc. The Portland, Ore. firm developed a patented eye-scanning system used by the CIA, American Airlines, Argonne National Laboratories and Brookhaven National Laboratories.

At American Airlines' underground computer operations, more than 500 employees peer in and peer out using the eye-scanning system that opens doors to let employees in and out.

Last year in Miami, the Dade County Jail was the first corrections department to use the system. It now plans to install 38 eye-scanning boxes to monitor the flow of suspects and prisoners. Among the problems Dade County officials hope to eliminate is that once or twice a year, the wrong inmate goes free because of paperwork errors.

In Fort Wayne, Ind., the Hilton Hotel monitors the time and attendance of 212 of its 234 workers.

### Prevents time card abuse

"The system prevents employees from using someone else's time card and prevents one employee from the early punching of a time card of a fellow employee who is 10 minutes late," said Joseph A. Corso, hotel manager.

The Chicago Housing Authority, however, wants to also monitor the productivity of its field workers. It plans to install 47 desk-top eye-scanning systems in 20 housing project management offices. Security officers and maintenance workers who must travel