Tekst 9

MONEY

The Digital Wallet

1   **WHEN STUDENTS** in Pinellas County schools fill up their lunch trays in the cafeteria and walk over to the cash registers, they just wave their hands and move on to have lunch with their friends. Schools in this Florida county have installed square-inch sensors at the registers that identify each student by the pattern of veins in his or her palm. Buying lunch involves no cards or cash. The Fujitsu PalmSecure system they are using allows these young people to get through the line quickly — wait times have been cut in half since the program started — an important consideration in a school where lunch is only 30 minutes long. The same technology is used by Carolinas Healthcare System, an organization that operates more than 30 hospitals, to identify 1.8 million patients, whether or not they are conscious. It is also used as additional authentication for transactions at Japan's Bank of Tokyo-Mitsubishi UFJ.

2   Many physical characteristics can allow a machine to identify an individual, but only a few of them are both unique and accessible enough to be this straightforward to use. Fingerprints and faces are not as unique as we have been led to believe and can result in false positives. They are also easy to fake. Although irises are unique, capturing them requires someone to peer into a reading device and stare unblinking for several seconds, which is easy to flub and feels intrusive. The three-dimensional configuration of veins in the hand varies highly from person to person and is easy to read with harmless near-infrared light. So why are we still paying for everything with credit cards?

3   The only barrier to such a "digital wallet" is that banks and technology firms are slow to adopt it, says security guru Bruce Schneier. "All a credit card is, is a pointer to a database," Schneier says. "It's in a convenient rectangular form, but it doesn't have to be. The barriers to entry are not security-based, because security is a minor consideration." Once a large retailer or government agency implements such a system — imagine gaining access to the subway with just a high five — it has the potential to become ubiquitous. The financial industry already handles substantial amounts of fraud and false positives, and switching to biometrics is not likely to change that burden. It will make purchasing as simple as ABC.

-Christopher Mims

Scientific American, 2011

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"The same technology" (alinea 1)

1p **35** Leg in je eigen woorden uit hoe deze technologie werkt.

2p **36** Geef van elk van de volgende beweringen aan of deze wel of niet overeenkomt met de inhoud van alinea 2.
1   Fingerprint recognition applications are no longer used for identification.
2   There are serious drawbacks to the use of facial recognition software.
3   Iris recognition technology provides an efficient method of authentication.
Noteer het nummer van elke bewering, gevolgd door "wel" of "niet".

"So why are we still paying for everything with credit cards?" (alinea 2)

1p **37** Wordt er in het onderstaande citaat van Schneiers blog antwoord gegeven op deze vraag?
Zo nee, antwoord "Nee". Zo ja, citeer de eerste twee woorden van de zin waarin het antwoord wordt gegeven.

> Besides the considerably improved forgery protection, the vendors of vein recognition technology claim further advantages. Compared to finger print sensors, vein recognition systems are said to deliver false rejection rates (FRR) to orders below that of finger print systems when operating at a comparable false acceptance rate (FAR). This can be ascribed to the basic structure of vein patterns having a much higher degree of variability than finger prints.
>
> https://www.schneier.com/blog/archives/2007/08/another_biometr.html

1p **38** What does the writer's conclusion in paragraph 3 amount to?
A   Biometric identification has a good chance of replacing credit card payment.
B   Financial institutions are vital in ensuring the integrity of sensitive data when implementing biometric identification.
C   The main reason to postpone using biometric identification is that it is not forgery-proof.

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