

# Using Biometric Security?

How will increasingly sophisticated biometric technologies affect you?

By Amanda C. Kooser

**C**ompared to biometric identification methods, passwords are clunky, insecure dinosaurs. If the burgeoning biometrics industry has anything to say about it, your fingers, face, eyes and even behaviors will be the preferred ways of securely identifying yourself. It's not just for James Bond movies anymore. This is the new reality. Crude fingerprint identification methods may have been around for 100 years, but what is new is the increasingly sophisticated technology applications and ever-improving accuracy of biometrics.

Let's take a look at a snapshot of biometrics today. Fingerprint swipers, the most recognized biometric devices, have found their way into laptops, desktops and doors. Entrepreneur Scott Moody uses a fingerprint reader on his laptop. The technology controls access to the computer and keeps data safe. Moody also happens to be the 49-year-old co-founder and CEO of AuthenTec, a leading fingerprint biometrics company that, as you might expect, uses fingerprint sensors to control access to its Melbourne, Florida, offices. In 1998, Moody launched the multimillion-dollar firm with co-founder Dale Setlak, 54.

Fingerprints are a doorway into the wide world of biometrics. Forward-looking biometrics companies are involved in everything from hand geometry and iris scans to voice recognition and behavioral biometrics. Grant Evans, CEO of A4Vision, prefers to face up to biometrics. His Sunnyvale, California, company is pioneering 3-D facial imaging technology. "It started out as bleeding-edge technology, and now it's cutting-edge, and it's just entering into the mainstream," says Evans.

Biometrics may have started off as technology for governments and law enforcement, but it is working its way into growing businesses and even consumer applications. Turn your gaze to Japan for a moment, and you'll see a proliferation of mobile devices with integrated fingerprint readers. It's a sign of things to come in the U.S. Confirming your identity is even more important now that phones are storing sensitive business and personal data and are even acting as digital wallets.

As Vali Ali, distinguished technologist with Hewlett-Packard, says, biometrics isn't just about security; it's

about convenient security. Users don't have to remember lengthy or weak passwords, and you always have your finger or iris with you. "The technologies that are going to win are the types of technologies that people want to use rather than have to use," says Ali. That's one reason fingerprint sensors are so popular. Swiping your fingerprint is a simple, nonintrusive way to identify yourself.

The future of biometrics is intriguing and complex. Both AuthenTec and A4Vision are businesses thriving in the field. Evans is pragmatic about A4Vision's prospects. "Someone will probably acquire this company because we're a piece of the puzzle," he says. Consolidation is underway in the biometrics industry, and that trend will likely continue for a while. Entrepreneurs interested in getting in on biometrics need to seriously consider the market realities. As Evans says, "Turning a concept into a viable company in this industry is very tough. It's difficult to compete now unless you have a disruptive technology that is new [and] that no one [else] has."

Still, that doesn't mean the pace of innovation will slow down. No technology is fail-safe, which is why multi-modal biometrics is a huge trend for the future. This approach involves combining more than one type of biometric technology. "It's a very common theme to use multiple technologies to tighten the gap for any security leakage or failures in the system," says Evans. Biometric devices are getting smaller, more accurate and more sophisticated. They're also getting more user-friendly. That's a key feature that will help spur adoption of more advanced biometrics. Says Ali, "You will see multimodal applications which are very pleasing, human-like and much more natural for interactions."

With biometrics, here's what a typical day might look like: You stop at the store on the way to your business and purchase a muffin using your credit card-enabled cell phone after identifying yourself with a fingerprint. To get into your office building, you have your face scanned. You access your laptop by scanning your fingerprint and speaking to the computer so it can recognize your voice. While you're out at lunch, you browse through a database on your smartphone using your fingerprint reader as an intuitive navigation device.

The popularity of fingerprint readers in laptops is just a

sign of the changing times. The majority of HP business laptops come with fingerprint sensors, as do laptops in Lenovo's ThinkPad line. Most things we use passwords, tokens or keys for today can be replaced with biometrics. Your car, house, office, monetary transactions, computer and mobile devices can be made more secure by embedding these new technologies. "Our product is something that can be virtually ubiquitous in your life," says Moody. "When we're old and in rocking chairs, we can say we were part of making this happen."