IT IS SAID THAT THE EYES ARE THE WINDOWS TO THE SOUL. But for biometrics experts, the eyes are an entry to something more tangible: secure and convenient identity authentication.

“Being able to prove who we are is vital not only for traditional business processes, such as access control, but also to the whole new economy of e-commerce and online services,” says Tovah LaDier, managing director of the International Biometrics + Identity Association, the industry’s leading advocacy and educational organization.

Iris recognition is one of a new generation of biometric identification technologies that are making identity assurance more secure and more convenient. And of the biometric identifiers, the iris is often called the most secure and accurate.

“Every eye is unique,” says Mark Clifton, CEO of Princeton Identity. The patterning of the iris is not entirely set by genetics; it is determined as the eye muscles develop in a growing infant, so even identical twins have different irises. “Only DNA is more accurate as an identifier,” adds Clifton, noting that some people call iris recognition the “golden biometric.”

Forward-thinking global organizations recognize the need to secure valuable data and create safe environments for their customers and employees without sacrificing convenience. Years before its spinoff from the R&D labs at SRI International, Princeton Identity began designing and developing the biometric security systems that have redefined security for individuals, businesses, and entire nations.

The company’s unique, patented iris-capture technology is ideal for busy corporate campuses as an access control solution, enabling a secure, seamless capture of the iris at a distance to authenticate an individual within seconds—no more PINs or keycards required.

“The security industry has historically dealt with a push and pull that pitted accuracy and reliability against ease and convenience—biometric identity management will end that tradeoff for good,” says Clifton. “Businesses no longer perceive safety and privacy as a luxury but as a standard.”

Other biometric identifiers, such as facial recognition and fingerprints, work best in different applications, says LaDier, but iris recognition is particularly effective in industries that require very high security, or as a supplement to fingerprints, which can be worn down over time.

And biometric technology is not just convenient. It can have a big impact on a company’s bottom line. For example, using keycards for attendance monitoring means that workers are able to clock in for other employees, otherwise known as “buddy punching.”

Clifton says one Princeton Identity customer saw a 10% payroll decrease by eliminating instances of employees clocking in for their friends and colleagues. And another customer—one of the 10 largest companies in the world—saved $5 million annually by extinguishing the need to replace lost secure keycards.

Through a partnership with Samsung, Princeton Identity has brought iris recognition to the consumer market. With the inclusion of its biometric technology in the Samsung S8 and S9 devices, millions of customers are now using Princeton Identity’s technology for authentication daily.

“Being able to do things we do every day—such as log in to our phones easily and securely,” says LaDier, “that’s the factor that really sells technology to the public.” With these capabilities, biometrics are poised to revolutionize the future of identity security.