

POSITIVE ID AT YOUR FINGERTIPS

SCHOOLS LOOKING FOR WAYS TO EASILY, COST-EFFECTIVELY- AND ACCURATELY - IDENTIFY STUDENTS, FACULTY AND BUILDING VISITORS, ARE LOOKING AT THE BIOMETRICS FIELD.

An interview with Raymond J. Fry identiMetrics

As CEO for identiMetrics, the leader in the development, integration and marketing of biometric student identity management solutions for schools, Jay Fry understands the issues and challenges of integrating new biometric technologies within a school's existing infrastructure.

SIIA: Can you give us a short explanation of what biometrics are?

Fry: Sure. Biometrics are automated methods of recognizing a person based on a physiological or behavioral characteristic. They include face, fingerprint, hand geometry, handwriting, iris, retina, vein or voice – anything that's a part of you. I recently read that even human smells have been studied! Fingerprint recognition is by far the most developed technology – currently 85% of the biometrics market. It's trusted, accurate and easy to use, and the most cost-effective and useful for most business implementations. All biometrics have their strengths and weaknesses. The key is finding the right technology for the right application.

SIIA: When I think about biometrics, I think about high-tech, high-security, complex and expensive government installations.

Fry: Believe it or not, biometrics is not a new technology. The ancient

Egyptians used bodily characteristics to identify workers to make sure they didn't claim more provisions than they were entitled to – just like governments today are looking at biometrics to lessen benefit fraud. And Chinese merchants in the fourteenth century used palm prints and foot prints to identify children. But when most people think of biometrics, they do think about high security technology – a technology that the government will use for passports and border control that banks will use to combat identity theft that police will use to find criminals that we see in the movies. But the high cost, high security, futuristic biometric technology unthinkable in education applications just a few years ago, is here – and it's adaptable and affordable.

SIIA: It seems that biometrics are catching on. Why is that?

Fry: Biometrics are catching on for several reasons.

The After-math of 9/11: There are very few technologies that undergo an overnight change, but that is precisely what happened to biometrics after September 11, 2001. The government sector and the concern about security have catapulted biometric interest and use.

The Proliferation of Identity Theft: Between 2005 and 2007, there will be

about 2 trillion dollars in financial fraud. People are beginning to understand that biometrics actually protects their privacy.

Lower costs & increased accuracy: School administrators are continually seeking ways to save time and money. They also have to have accurate reporting capabilities. They are seriously looking to biometric systems to improve operations.

Technology Improvements: Just like computers and plasma TVs, the early models were expensive and feature-poor. As a result of time, the biometric technology has improved and costs have come down.

Lower Cost of Ownership: Price is no longer an obstacle in the buying decision with certain biometric technologies, such as fingerscan biometrics. Today, fingerscan biometrics can actually be priced competitively with barcode readers, swipecard readers and PIN pads from a total cost of ownership point-of-view.

Consumer Awareness: Recently, we have seen biometrics introduced and advertised in a variety of areas in the consumer marketplace. Laptop computers, grocery stores and automobiles, for example, are using a biometric fingerscanner to identify

people. We find that the more familiar people are becoming with biometrics, the more they feel comfortable and like the convenience of just having a finger for identification. In fact, a growing number of Americans believe that fingerscanning is a more secure form of identity than passports, credit cards, photo IDs, birth certificates and signatures combined. And when biometrics are introduced on cell phones in the US in the next year and a half (they're already in Japan), we expect that the acceptance of biometrics will explode. Experts expect a 29% annual growth in a worldwide biometrics market that's expected to reach \$3.4 billion in 2007.

SIIA: What about privacy issues?

Fry: Biometric technologies don't conjure up the Orwellian fears they used to. Of course, some people still grumble

these methods creates its own issues, delays, and is also a drain on time and resources.

Cards are regularly forgotten, lost, mutilated and shared; PINs are easily forgotten (especially with young children), swapped or stolen. And visual identification is a poor solution especially with today's considerable security concerns and reporting issues. By using biometrics for identification, the problems and costs associated with the current methods can be avoided and new standards of accountability can be put into place.

SIIA: Why would a school use biometrics?

Fry: Quite simply, to save time and money - and improve the accuracy of reporting. Biometric technology can provide benefits in terms of

to eliminate "buddy punching" and for providing irrefutable proof of attendance for record-keeping purposes. Biometrics can help cut down on "class cutting" when attendance is taken on a period-by-period basis; this is a headache for every school administrator. Biometrics can be used in the library to check-out books, eliminating the need to swipe a card or punch in a PIN and protecting the school's assets. Biometrics can be used in the nurse's office to make sure that the students are receiving the correct medication, a liability in every school environment especially with the amount of medication that's being dispensed on a daily basis. And using a biometric identification system that is a platform will ensure that as your needs for biometric identification grow within your school and school district, your system will be able to scale.



at the mention of systems that scan fingerprints because of misunderstood privacy fears, but overall the acceptance of biometrics has risen substantially over the past few years. In fact, people are now realizing that biometrics actually protect their privacy and that in many biometric applications, including the one identiMetrics employs, their fingerprints are not stored anywhere and their fingerprints can never be recreated from the digital template. Minutiae based systems, like ours, use flat images of only two fingers to create templates. Flat images reveal the center of the finger and require only a minimum of unique identifying points in order to make a match. The purpose is to identify a person already enrolled in the software. Fingerprints can never be recreated. We have found that 100% of our customers that have used our software in a pilot setting buy it.

SIIA: What are schools using now for identification?

Fry: Many functions in a school environment require identification. The most common kinds of identification currently in use are smart, swipe, barcode or picture ID cards, PINs; and, of course, visual identification. Each of

convenience, safety and security. There are two areas of identification that schools have to manage: students and employees. Biometrics are beginning to be used in both of these areas.

In some schools, teachers, staff and employees are using fingerscanning for time & attendance, making record keeping very accurate. Fingerscanning can be used to identify people that come into the school on a regular basis, like substitute teachers, contractors, parents, so you know who is in your school and when they left at all times. This has proved to be an invaluable tool for a school, especially when there is an incident that requires investigation.

Biometrics can be used to identify students as well. There are several areas where a school can use biometrics to help improve operations. The cafeteria is usually the first area in the school to embrace biometrics. With up to 80% of students forgetting or losing their cards on a daily basis or forgetting or sharing their PINs, lines are slowed and mistakes are made. Biometrics will be used in vending machines in the near future to ensure positive identification of children eating free or reduced lunch. Consider using biometrics for attendance in order

SIIA: What would you recommend as a practical way to implement biometrics?

Fry: Start by making small improvements. You want to improve productivity, record-keeping and of, course, safety. Take baby steps!

Identify and assess your "pain" Where in your school could the use of fingerscanning instead of cards and PINs save you time and money? Is it in the cafeteria eliminating the cards and PINs? Is it at the front door for attendance so you know who is entering your school? You decide.

Communicate, educate and train the people who will be involved. This is usually the weak link in implementing any new technology and implementing biometrics is no different. Train, train and train

We have found that once biometrics is being used successfully in one part of the school, the idea migrates and is embraced in other areas as well.

SIIA: What should a school think about when choosing the right biometric solution?

Fry: Great question since this can be a

daunting task. It is really important to not be short sighted here.

Choose a biometric identification platform that can eventually be used throughout your entire school. This means that students should be enrolled only once to be identified in a variety of areas in the school – the cafeteria, the front door or classroom for attendance, the nurse’s office, the library and the office for absence information entry.

Make sure that it can scale if needed. Some biometric technologies work great with ten students or less in a standalone environment, but fail miserably as the

implementations. identiMetrics has successfully developed biometric technology to read the fingers of young children – a must in any school setting. You want your biometric identification to work – Every time.

Ask about performance accuracy. There are basically four metrics: false acceptance, false rejection, failure to enroll and failure to acquire rates. In particular, false acceptance rates are what you should be most concerned about. That means I place my finger on the scanner and your name comes up. With identiMetrics’ software, for instance, the false acceptance rate is 1 in

place such as PINs and swipecards. Biometrics, and in particular fingerscanning systems, provide irrefutable proof of identification. Unlike the complicated and expensive government systems in the past, biometric fingerscanning systems can be simple, cost-effective and technology friendly. At identiMetrics, we have provided fingerscan biometrics to a variety of organizations, and in particular schools, to make things work faster, safer, cheaper and more reliably. If children can do it, you can, too. It’s just smart business!

BIOMETRICS, IN PARTICULAR FINGER SCANNING SYSTEMS, PROVIDE IRREFUTABLE PROOF OF IDENTIFICATION.

number of students increase in a networked environment. A more robust biometric technology might cost a bit more, but will be worth it in the long run. For instance, identiMetrics can accurately identify students in milliseconds no matter how large the enrollment.

Make sure that it can integrate with your software applications that you already have in place, if you don’t want to replace them. Many biometric technologies will only work with a specific application, and you have to buy that application for it to work. Other biometric technologies, like ours, can easily be integrated into applications that you already have that are working just fine.

Make sure that it works. Some fingers, especially young children, are just hard to read. Most biometric companies have only focused on adult fingers for employing biometrics in mass

200 million, certainly an acceptable limit for schools.

Compare, but not just on price. Check up on customer support and roll-out experience. Once again, make sure the technology works in a practical setting and not just in a vendor lab.

Communication, communication and communication! Make sure everyone – parents, teachers, students, administrators, the school board and the media have up to date and accurate information about biometrics. identiMetrics has a *Guide to Implementing Biometrics* that includes, for instance, sample letters to parents, biometric FAQs, best practices and other important information to make the whole process run smoothly and easily.

Cost-effective biometric technology is here today with practical uses for schools. It’s a perfect solution for schools who are dissatisfied with the current student identification systems in

Raymond J. Fry is president and CEO and chairman of the board for identiMetrics. He brings a wealth of experience to identiMetrics, having served as an executive professional throughout his career. He was formerly the principal and senior administrator for a large school in the Chicago area. identiMetrics Inc., an identity management company, is a leader in the development and marketing of biometric finger scan identification solutions. identiMetrics’ proprietary software, identiFi, is a biometric finger scanning ID platform that provides a cost-effective and accurate replacement for swipe-cards readers, barcode readers and PIN pads. For more information, visit www.identimetrics.net