

# Identity is everything

by Catherine Johnston

## Advanced card technologies make it affordable... and convenient

**H**OW DO YOU TURN the cost of security into a marketing advantage? A number of companies have found a way and today both private and public sectors are looking at their options. Both see significant advantages to conducting transactions online, but that requires consumers to trust systems with varying degrees of their personal information.

Not that long ago, day-to-day business was easy to carry out if you lived in a small village, because everyone knew you. In larger cities that wasn't true, and you needed the ability to identify yourself. Today, regardless of where you live, you want to take advantage of global business and information opportunities. That means you must be able to identify yourself in order to travel, bank, buy and work. The same is true of the governments and companies doing business at the other end of the network connection.

The link between business and identity involves not only buyers and sellers but also employers and employees. In a world where data is the new currency, privacy and security are tightly coupled with identity and commerce. What does this mean to employers? Basically it means protecting your customers' data in the same way you protect your offices. Your ability to do that can influence a customer's decision to deal with you electronically.

Today's citizens hear frequent reports of databases being hacked, personal information being hijacked and identity theft growing annually. Your investment in physical security and firewalls addresses the external threat, but that is only a part of the problem. Where outsiders often perpetrated early attacks, we now find that many

involve employees or contractors and that is changing the way employers view security. Where it was once enough to control your employees' access to buildings and offices, you now need to look at your corporate data with the same concerns.

The concept of controlling who may access data and what they can do with it is not new. That was always the case with mainframe computers. Not everyone with access to a specific mainframe application could access other programs. For example, if you were an inventory control clerk, you wouldn't be able to get into the payroll system. If you were the payroll clerk, you would be restricted to certain functions and changing your own salary likely wasn't one of them. When we went from mainframes to PCs many of these controls were lost. With today's networked world and the value of data, it is time to re-introduce them.

This has led many corporations and governments to look at the use of advanced card technologies to provide secure and convenient physical and logical access. The very concept of security plus convenience sounds unlikely, but smart cards make it possible.

Computer chips that sit on credit card-sized pieces of plastic are being used throughout the world to provide new levels of security. They are highly counterfeit and tamper resistant and much of their strength comes from the fact that the computer can play an active role in enforcing your security rules.

This technology is not new. Smart cards were first invented in 1969, but were not nearly as smart or affordable as they are today. They have developed to a point where you can load multiple applications,



**A**CT Canada, the Advanced Card Technology Association, is internationally recognized as a reliable source of information on advanced cards and the Canadian marketplace. A non-profit association founded in 1989, ACT Canada works on behalf of members, both domestic and international, to provide information, networking and market analysis. This is a neutral forum for stakeholders to learn, share information and pursue their goals. For information visit [www.actcda.com](http://www.actcda.com).

On June 13, 2006 ACT Canada will be hosting Cardware 06 in Toronto, a look at card infrastructure for payments and emerging trends in applications. On June 15<sup>th</sup> it will host *Cardware 06* in Ottawa where the focus will be on identity management for citizens and employees.

just as you would with a PC. One application could control access to a building and, unlike a physical key, you can stipulate the hours of the day and days of the week. Another can be used to securely store an employee's data access privileges.

Coupled with security on the network, you can grant or restrict the ability to load software, download files, use the print or communication functions and all other aspects of computing. You can store encryption keys and digital certificates, even biometrics. You can even determine the rights to add, modify or delete data right down to the field level. All this increases internal and external security, as well as enabling good privacy protection, another plus for citizens and your marketing campaign.

These applications can reside on a smart card that also supports contactless functions, such as helping employees move quickly through doors and other security points, without having to take time to insert their cards into readers. Some organizations add an electronic purse application to employee smart cards to facilitate payments in vending machines, the cafeteria

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or at local merchants. It is easy to envision organization-sponsored transit fares being added as well. As more functionality is added to the card, the business case continues to improve, but the benefits go beyond those that can be calculated in dollars.

In a global economy where competition is fierce and margins often tight, the ability to build user confidence can give an edge, particularly with customers who are concerned about privacy and identity theft.

In the United States, the federal government issues a common access card (CAC) to military personnel, government civilians and contractors, and has plans for a new, standardized identification card for all federal employees. The program was developed to improve security for all employees worldwide who send email, digitally sign documents and access secure systems.

Mary Dixon, deputy director of the Defense Manpower Data Center points out that the card is only one component of identity management. A benefit of the new ID cards is that each individual will have to meet the same security standards to get the card. "It means that I can have more trust in somebody else's credential, because I will know that they met at least some basic minimum standards for issuing that card," she said. "I will know that they did the proofing of the person and they made sure they were issuing it to the right person, and they did some background vetting on that person. They're not just issuing it to some person that appears on the scene."

Vetting an employee once for physical and logical access not only saves time and money, but also can point out inconsistencies in access privileges. Issuing one card for both purposes again provides savings.

Finally, the card's ability to use biometrics and other measures to ensure that the person presenting it is indeed the rightful owner of the card goes well beyond many of the cards used today for physical access.

Security is also a driver in the financial sector. Today countries around the world are moving to smart, (chip) cards to provide security for MasterCard and Visa credit cards. In Canada, where many other initiatives are underway, we are also moving our debit cards. ❧

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