Being in control

So you think you know all about access control?

A n access control system forms part of an organisation's security requirements. It's essentially there to permit or deny access through a particular door or gate. There are different technologies employed within the systems on the market, from swipe cards to keypads, proximity and biometric systems, but essentially they all perform this same task to a greater or lesser degree.

Or do they?
Certainly the more basic systems on the market are only capable of performing this one task, but there's a whole new breed of access control systems – including those from South African manufacturer Impro Technologies (PTY) Ltd – that have been designed to cater for a much wider range of functions that you may simply have never considered before. What about using the system for time and attendance monitoring in a factory, or how about for solving parking solutions in your office car park? Even better, what if you could actually use your access control system to help reduce overheads such as your power bills? Such a system is no longer a simply security device, but a highly adaptable and cost-effective business management tool.

Hassle free parking solutions
When combined with vehicular gates and barriers, for instance, an access control system isn't just able to control who enters and leaves a car park, but brings to bear some very clever parking solutions without the need for a custom built design. As a result, we can now provide end users with, for example, the ability to monitor and restrict parking bays and track vehicles, as an off the shelf solution.

In the case of parking bays, using an access control system with a suitable gate, barrier or bollard (depending on the level of security), organisations can limit the number of vehicles in a lot or on a floor-by-company or by-building basis; once the area is full, a vehicle will need to exit before one can enter. Access time patterns, restricting individuals, departments or companies' access to specific hours and days, can also be included.

Other features that customers can benefit from by using this combined access control and automated gate approach include: anti-passback to ensure tags cannot be given to an unauthorised person to enter after that tag has been used; messaging, to allow the administrator to display messages to a time and attendance terminal or to an LCD display; and weight limitations, to guarantee vehicles over a certain weight cannot gain access.

Some more advanced access control software can link to contractors' payroll systems

Time & attendance reporting made easy
We mentioned just now that the access control system can be linked to a time and attendance terminal to allow the administrator to display messages; an interesting and useful feature, but that's only the start of what can be done in this field.

Let's take a construction site as an example of how an advanced access control system can be used for time and attendance purposes.

Monitoring staff's whereabouts can be a real headache due to the nature of a construction site, which can lead to compromising health and safety and issues of time and attendance, with very real financial implications for the contractor and developer. But if you could cost-effectively monitor who is on site and for how long then many of these potential problems could be wiped away at a stroke.

Some more advanced access control software can link to contractors' payroll systems (subject to payroll package requirements), advising who has been on site and when. The contractor or developer can simply, quickly and conveniently export the data and provide comprehensive reports, such as time sheets, by person or even by company and department / trade. They can also check to ensure only authorised people are on the site – essential for health and safety – and how many, so you are not paying for 'ghost' staff. And you don't even need to be on site to do all this – all the information can be fed back to a PC anywhere in the world.

Real financial benefits can be gained in every day use and especially during acceleration periods. This makes it extremely cost-effective as the initial equipment outlay is small and installation is quick and simple, while the potential savings you make as a result could, in theory, be considerable.

Flexibility of the access control system is key here, enabling it to perform a wide range of time and attendance functions. For example, the system could be set to require a 'reason code' before an employee leaves his area during working hours. Any number of reason codes could be listed, but the employee must select one before the door will open. This gives management not only an accurate picture of who is leaving and for how long, but just as importantly, why. It helps address any staffing issues quickly and simply.

Combining access control with an organisation's time and attendance software is a powerful human resources tool and could help organisations to save money.

Power saving: good for the environment and the pocket!
And saving money is certainly something advanced access control systems are ideally suited to as many have the ability to turn electricity on / off to specific appliances or areas. This can provide end users with considerable cost savings when it comes to power bills from heating, lighting, air conditioning, PCs, factory machinery, etc.

This is achieved through zone counting, using sensors or long range readers to activate or deactivate power supplies. Specific areas' power can be controlled by fitting the access control system with IN and OUT readers at the entrance of each zone, configured to support strict anti-pass back control. The readers' software counts people entering and exiting the zone; the first person to enter activates the power on; the last person to leave automatically triggers the power off. Such a method is ideal for larger zoned areas, such as factories.

For installations that are in operation 24 hours day, energy savings can still be made using the access control system with either PIRs or long range readers. The former are used to turn power on in specific areas where movement has been detected, i.e. turning off the lights on an office floor which has been vacated by all staff at the end of the working day or weekend. Instead of detecting movement, this set up uses strategically placed readers (usually in a hallway) to read the employee's access control cards from up to a metre away; power is then activated in the zone ahead.

Of course, the ability to turn electricity on / off to specific appliances or areas also has safety implications. If a site has heavy duty machinery that needs licensed operators to use it, it is essential for the management to prevent non licensed personnel trying to operate it. Installing a keypad reader to the machinery linked to the access control system means an employee must then present his / her tag to the reader and punch in their unique PIN code. It might even be the case that the machinery cannot be used until a supervisor is in the room. In this instance, power will only be activated once the 'supervisor unlock' tag has been presented.

Take a bigger picture
With such a wide range of possible uses for an advanced access control system, such as the Impro range, end users have plenty to gain. Consider how these scenarios might apply in your own business. Do you have parking issues? Could you benefit from improved time and attendance reporting? Everyone could benefit from saving money on their power bills, but where could this best be applied? By giving your installer a bigger picture about your overall requirements, he should be able to provide you with the security you need and might even be able to help solve other business solutions cost-effectively at the same time.

Janine Lewis is sales and marketing director, BPT Security Systems (UK) Ltd. BPT Security Systems (UK) Ltd. is the exclusive distributor of the Impro range of access control systems in the UK. For more information please go to www.bpt.co.uk or call 01442 230800.