

Time and attendance systems are central to the HR operations of many organisations, and technological improvements are rapidly changing the face of such systems. Melinda Finch examines some of these latest developments, considers the pitfalls and shows how to measure ROI

The 1997 film *Gattaca* introduced a futuristic workplace where identification and productivity tests were conducted on a regular basis through biometric technology. Ethan Hawke's character gains entry to his office building only after having his fingerprint scanned. The days of office swipe cards and security tags, it seemed, were numbered.

Still, while Hollywood laid out this vision nearly ten years ago, the take up of biometric technology – automated methods for uniquely recognising humans based upon one or more intrinsic physical or behavioural traits – by Australian workplaces has been extremely slow. But in the area of time and attendance (T&A) systems, changes are finally starting to occur.

Brave new world

T&A systems have always offered an array of benefits to employers, from increased cost control to reduced human error and greater control of employee time theft, a reduced administration when attendance data can be transferred directly to payroll systems, and faster returns on investment.

"Time and attendance systems are an integral part of managing key performance indicators," says Rob Camilleri, an IT manager who has worked for organisations such as Berri, a unit of National Foods, Australia's largest citrus and fruit processor. "They now go beyond recording start and end times and actively contribute to gaining an insight into the activities that are being performed."

For example, in the manufacturing sector, "based on the level of detail required, manufacturing staff can record their movements between activities and therefore allow full transparency and cost analysis of where their time is spent", he says.

Employee time theft – where employees over report the amount of time spent on the job or stretch a break to last longer than scheduled – has always been a major problem for HR departments. Even 5 to 15 minutes misrepresented per day can add up to an extra week of pay per year per person. Multiply this cost across all employees and it is easy to see the impact on profitability. Time clock software has been addressing the issue for years but technological improvements are making it better than ever.

"Not too long ago these time and attendance systems were typically site based with little or no visibility outside their physical location. The latest technology allows managers to access the systems from any location," Camilleri says. "For businesses with multiple sites, the administrative burden can be streamlined and aligned to payroll functions based anywhere within the group or aligned to an external payroll provider."

What ' s new in T&A

The workforce management systems developer RITEQ has created a new product that allows retail or hospitality employees, for example, to clock on at the point of sale terminal using a fingerprint reader.

"We've developed some unique technology where we can plug a little fingerprint reader, a \$230 device, into any Windows computer that's connected to the internet. We can turn it into a time in clock, while it's being used for everything else," says David Kroser, marketing director of RITEQ.

"The key thing with introducing something like biometrics is that it's all about accountability," Kroser says. "Say I'm rostered to start at nine and I consistently arrive five minutes late and I write into my time sheet nine o'clock. It's about catching those five minutes because when there's a biometric time clock or a fingerprint reader there there's a subconscious accountability that happens with the employee. They know they have to be on time because they cannot adjust the timesheet."

Benefits

Additional advantages of this type of biometric T&A system, Camilleri says, include consistent interpretation of enterprise bargaining agreements (EBA) and the removal any ambiguity or bias that can exist with manual systems. It also gives line managers responsibility for approving and authorising their own shifts. This includes approving overtime and confirming annual leave. There is also greater visibility to groups typically not exposed to time and attendance applications. "Modern time and attendance applications now incorporate competency management modules that allow HR to proactively manage succession planning and training requirements, both legislative and internally driven," he says.

The technology that helps to deploy these systems across a number of different work sites and even countries is becoming more affordable and accessible. "Most homes now have computers and as such employee self service

functions are further streamlining the T&A and HR processes by facilitating online leave requests," says Richard Hazeltine, managing director of MyWorkplace Solutions. "Technology has also advanced with clocking equipment. Many devices can double up as employee kiosks and of course the increasingly popular biometric systems are becoming more affordable." They are also becoming less problematic: "Biometric systems are often seen as an invasion of privacy and it has taken some time for the acceptance to increase in Australia," he says.

"There is no privacy issue with the fingerprint technology we use," Kroser says. "With some of the older technology some of the fingerprint readers used to actually take a physical image of the print and then there was a privacy issue. Now, when I enrol my fingerprint it generates a formula like an algorithm of numbers, which represent my fingerprints. You can never actually reproduce the fingerprint from that formula. All we can do is that when I come and verify it, is compare two formulas against each other and it's verifying within a certain tolerance of those two matching."

All change

"Having said that, there is a lot of change management that goes on with introducing systems like this," Kroser says. "And you do need to deal with it because often you go into organisations and they look at putting fingerprinting in and you have employees who refuse to put their fingerprint on there. But we have documentation that proves there are no privacy issues and all the organisations [including BaySwiss, Krispy Kreme and Cargo Bar] that we have ever dealt with have all been able to overcome any issues that arise."

Hazeltine believes most companies that successfully introduce T&A systems and biometric clocks do so by employing a consultative approach to their implementation. "Whilst it is not as common now as it was ten years ago, there can still be an inherent distrust of time recording systems particularly if activity based costing is implemented also to measure productivity," he says. "HR departments have done a great job in educating their workforce with the benefits these systems provide to employer and the workforce alike. My experience is also that IT doesn't have a big role in this acceptance process. Their role seems to be more about ensuring the system fits from a technology perspective but also provides the benefits back to the business."

From an IT perspective, Camilleri believes the advantages outweigh the disadvantages although "the whole change management needs to be addressed, especially when dealing with people and introducing new ideas".

Building a successful business case for T&A systems in the first place can often hinge on whether the existing systems are old and no longer supported by the previous vendors. "The decision to cut over to a new system can often be justified on the basis of EBA compliance, standardisation of processes and consistency amongst sites where possible, as well as greater visibility over workforce management from other sites such as head office, and reduced administration and personnel backup as more people are introduced to the new system and gain access to it once properly authorised," he says. Methods for measuring return on investment can include cost saving, cost avoided, revenue impact, compliance and performance improvement.

No limits

While the use of other biometrics, such as *Gattaca*-style DNA analysis, at work is hopefully something that will never happen in our lifetime, it is inevitable that biometrics will come to play a greater part in all our lives.

"I believe this technology will have its place but not necessarily as a timekeeping process. Organisations where security is an issue have already adopted technologies like iris scan so DNA sampling is a possible extension," Hazeltine says. "I can imagine the day where a payroll officer may have to have a security check via such technology before being able to transfer money to the bank for payday. The reality in my view is that this advanced technology may be more useful for the traveller – airport security and passport validations would be an obvious example."

The British Home Office has already confirmed plans to fingerprint all passport applicants within the next five years and store the information in a chip on the passport, while the Australian Government recently announced the release of the biometrically-enabled ePassport which has a microchip embedded in the centre page which contains the digitised facial image and personal details of the passport holder as they appear on the data page. The microchip can be read electronically and will enable the implementation of facial recognition technology. So even the sky, it seems, isn't the limit anymore.

18 April 2006

[Back to Gridpay](#)