Time & Attendance Technology Trends Advance Over Time
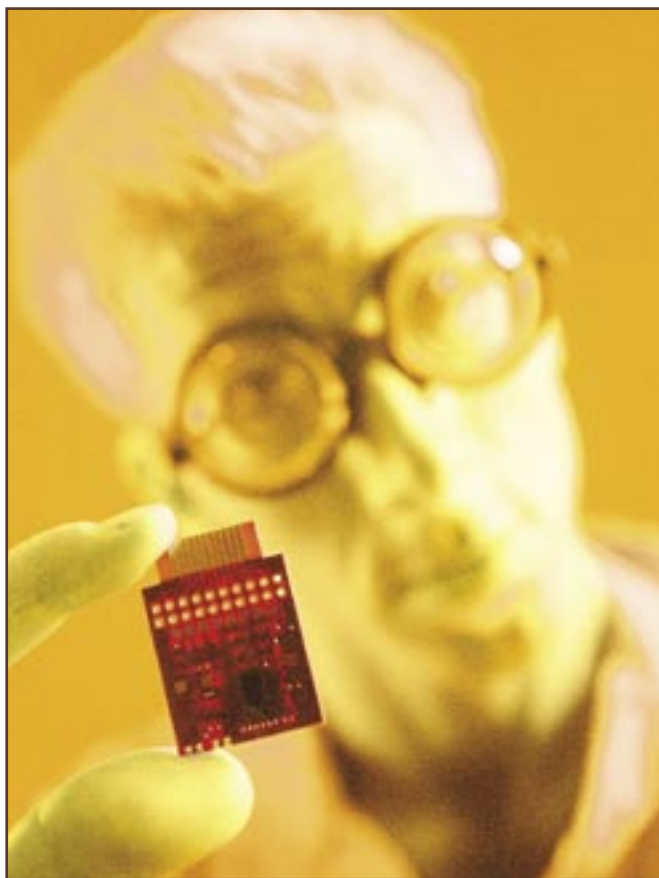
BY LAURA BRAY

Tyrannosaurus Rex ... EXTINCT.
The dodo bird ... GONE.
The time clock?

While it may not be headed for imminent extinction, the stand-alone time clock is certainly diminishing in numbers. New and maturing technologies have enabled organizations to make time and attendance reporting part of an integrated labor-management solution, resulting in a host of benefits for both employees and employers.

The March Toward Integration and Real-Time Data

Today's more robust computing solutions and databases can handle a large number of files and programs while providing a totally integrated system and real-time reporting.

In 1965, Gordon Moore, co-founder of Intel, predicted that every two years computer chips would double in power, with a resulting reduction in cost. This axiom is now referred to as "Moore's Law." Systems that were unthinkable five years ago, because of the costly computing power required, are now affordable and easily deployed. These days, you're more likely to find strategic workforce management solutions that allow for true integration, real-time reporting, and optimal performance, rather than simple stand-alone time clocks. Businesses are now able to use these tools to look at labor management in a strategic sense.

"These systems help organizations become better at serving employees, meeting compliance and regulatory issues, and tightening labor management," said Robert Thomas, Division Vice President of Time and Labor Management with Automatic Data Processing, Inc. (ADP).

Daniel Debow, Vice President of Corporate Development for Workbrain, said advances in technology have made it much more convenient for managers and workers alike to do their jobs more efficiently.

"Workforce management is moving away from back-office, transactional functions to front-office, line-of-business operational applications that organizations can use to deploy workforces more effectively," he said.

Open protocols such as XML (extensible markup language) allow a variety of systems from different vendors to seamlessly share data. Instead of having to download a time and attendance file, reformat it, and send it to the payroll department or provider (all of which requires technologically skilled employees), systems can now transmit that data directly, saving time and eliminating most errors.

One of the main drawbacks of reporting from traditional time and attendance systems is dealing with the dated material contained in the reports. Once managers see them, any problems they may notice can potentially be days or weeks old—often too old to solve.

Modern time and attendance solutions use the power of the Internet to produce reports right on the desktop with real-time data. With newer equipment and systems, employees can now access leave balances and request schedules and check deductions, eliminating the need to request such information from managers or payroll staff. Since employees have more ownership over their schedules (for example, they can now request desired hours), absenteeism decreases. Managers can pull reports and analytics on scheduled hours versus actual hours, obtain real-time information on shifts and attendance, and analyze excessive overtime hours or tardiness with current data, so they can do something immediately to correct the problem.

Systems deliver all of these self-service functions via user-friendly kiosks or dashboards so managers and employees don't have to learn complicated software systems.

"Analytics are increasing in importance," said Clay Ritchey, Senior Director of Product Marketing for Kronos Incorporated. "Systems today use decision-support tools to

put more power and information into the hands of managers so they can make better decisions."

As Web-based systems gain in popularity, the most successful companies are coming to realize the importance of deploying the proper time-collection system for both the location and type of employee. For example, knowledge-based workers don't like time clocks, but they can easily record their time by project via the Internet. Traveling employees may not have easy online access, but they can transmit their hours with their personal digital assistant.

"Time recording isn't just for payroll anymore," says Curt Finch, CEO of Journyx. "Systems today can capture time from all employees and feed it into an automated billing system (such as those used in law firms) or a project accounting system."

Older technology restricted the ability of databases to handle large amounts of data, but as servers continue to increase in power and memory capacity and software tools continue to mature, large, scalable databases can handle not only an increasing number of employees, but also complex rules and regulations. Today's time and attendance solutions allow for reporting and tracking of regulatory compliance issues like Sarbanes-Oxley, FLSA, and FMLA.

"A good time and attendance system can now take care of a host of government-mandated compliance issues," said Robert Farina, CEO of CyberShift.

Maturing Technologies

Other technologies, such as biometrics and wireless, have matured greatly in the past two years. (For a good overview, see the January 2004 issue of PAYTECH). Employees have become more familiar and comfortable with biometric technologies (such as fingerprint scanners), leading to more widespread acceptance.

According to the APA National Payroll Week 2005 survey, more than 50% of those who responded said they "wouldn't have a problem" with biometric devices. Scanners can

now be attached to time clocks, PCs, employee self-service kiosks, or even deploy remotely. In addition, prices for such high-tech equipment continue to decrease, putting the devices within reach for more organizations.

Wireless technology is gaining in widespread use and popularity as more companies discover its many benefits. According to Gartner Inc., a research and advisory firm, worldwide mobile phone sales in the second quarter of 2005 increased 21.6% from the same period last year—its second strongest quarter on record. In a 2005 survey of network and telecom decision-makers, Forrester Research reported that more than half those polled said they had already deployed some type of wireless application. Nearly 30% said they were interested in some kind of line-of-business application, such as time and attendance.

Wireless devices are able to update managers with real-time notifications, such as a late employee arrival or a no-show. For example, Julie Nelson, President of Smith Legacy Security, said security firms often depend on their guards to be in a specific place at a specific time, largely without direct supervisory attention.

"A wireless system can confirm or deny that the guard is where he's supposed to be, when he's supposed to be there, and then transmit that data using the same technology as cell phones," she said. "If a guard doesn't check a certain door at a certain time, the wireless system informs me in real-time, so I can take care of the problem."

Remote or traveling employees can also record their time via an integrated voice response (IVR) system, which allows employees to record time and attendance on the telephone using prompts. These systems provide the ability to check benefit accruals, transfer hours, or review hours worked.

New on the Horizon: VoiceOver IP

Voiceover Internet Protocol (VoIP), also known as "Internet telephony," enables telephone calls (for either residences or businesses) using a

broadband Internet connection instead of a phone line. According to leading business VoIP provider Cisco Systems, VoIP can "eliminate costly, inflexible, and redundant proprietary circuit-switched Private Branch Exchange office phone systems," resulting in lower infrastructure and management costs. Instead of paying for both a phone line and high-speed Internet access, organizations are able to save money by paying for only the latter. The Forrester Research survey found that 36% of the businesses polled are either considering or already piloting VoIP.

Once deployed, organizations look for additional applications, such as time and attendance, to run on the platform. According to Bahan Sadegh, Chief Technology Officer of Time America Inc., "this allows them to leverage a technology they already have."

Employees can use IP phones to clock in or out, view scheduled hours, or check benefit accruals. In many cases, organizations can provide IP telephones to all employees for less cost than a wide deployment of PCs.

Time Clocks Out, Intelligent Devices In

Moore's Law prediction of greater computing power in PCs and servers also applies to time-clock devices. These days, instead of a simple time-recording device, time clocks have intelligent work rules built in. For example, if an employee clocks in for an eight-hour shift, the time clock can check his or her total hours for the week and issue a warning if the shift will put the employee into overtime.

In most cases, organizations are replacing expensive time clocks altogether with lower-cost devices such as older PCs because "an organization can connect a biometric device or card reader on a lower-end PC, significantly reducing costs," said Snehal Shah, CEO of iEmployee.

It's not such a stretch, then, to imagine that one day soon, on a visit to the Smithsonian, a time clock will be placed right alongside computer punch-cards and rotary telephones as a reminder of days past.