



**BUSINESS.COM GUIDE TO TIME AND ATTENDANCE SYSTEMS**

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# OVERVIEW OF TIME AND ATTENDANCE SYSTEMS

## HOW

**The days of the punch clock have gone the way of the rotary dial phone and Atari computer games. There may still be some companies that use them, and perhaps they work well enough for them; but most modern businesses no longer care to laboriously compile paper cards and manually record what's on them.**

Knowing what your employees do, where they do it, and when they do it is absolutely essential in order to control your costs and make maximum use of your resources. With an automated time and attendance system, it's more difficult for anyone to "clock in" for someone else, tack on hours that weren't actually worked, or round up a few hours here and there on a manually entered timesheet.

In a sense, Big Brother has arrived, and he's helping you measure and improve the productivity of your workforce.

A properly implemented time and attendance system will help you:

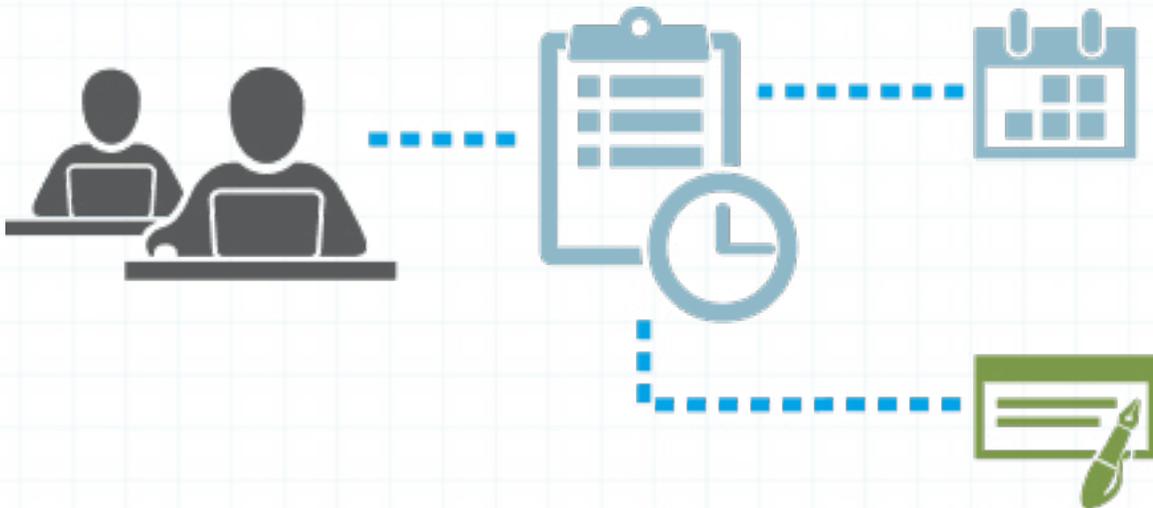
- Measure and reduce labor costs
- Stop "time theft"
- Comply with wage and labor regulations
- Protect against payroll fraud
- Save time on payroll preparation
- Expedite employee requests for vacations and time off
- Export data into payroll systems such as ADP, Paychex, and QuickBooks
- Measure worker productivity
- Accurately track employee time to generate billable hours for clients
- Ensure facility security by restricting access to authorized personnel
- Track who goes in and out of a facility to provide an electronic record to investigate lost or other misappropriated assets
- Ensure that wages are correct

## WHY

**The net results include significantly lower operating costs, and improved productivity and efficiency. Forrester Consulting conducted one study that found an 85% return on investment (ROI) for one particular company, with a payback period of 14 months.**

Also, a survey conducted by the [American Payroll Association](#) (APA) reported up to a 4% annual savings on gross payroll by participating companies that implemented an automated time and attendance system. When you consider that 4% is more than double the operating margin of grocery retailers, you can see that an efficient tracking system could mean the difference between profit and loss.

Time and attendance systems typically record where and when workers start and stop work; but they can also track break times, types of work performed, and how much work is produced. It can also track non-work activities such as vacation time, sick days, jury duty, and tardiness.



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## WHY

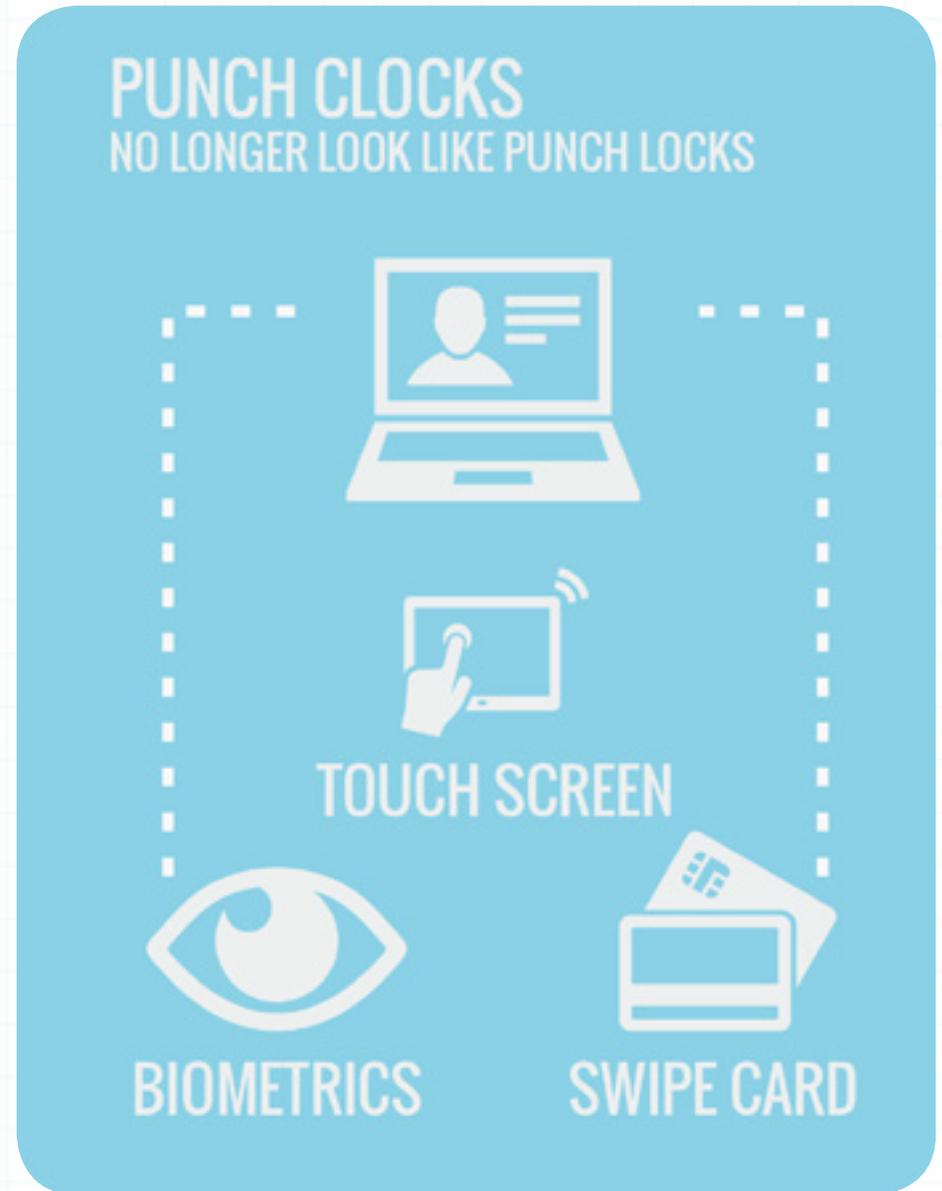
**Check-in and check-out.** The “punch clock” of an automated time and attendance system could consist of a magnetic stripe card or barcode badge that is swiped on a reader, a simple touchscreen where a simple code is entered; or some kind of biometric system that immediately recognizes an individual’s identity through highly sophisticated hand, fingerprint, or facial-recognition software.

Processing the data. The recorded information is routed to a computerized database from which timesheets are compiled to compute employee wages as well as generate management reports. It is particularly useful for companies that charge based on labor hours expended in performing a job or supplying a service to their customers.

### More Than Punching a Clock

Time clocks report fairly simple data of who clocks in, where, and when. In many situations, particularly with small companies, that could be enough. But the more complex the organization, the exponentially more complex the time and attendance task—and the more types of information the company is able to collect (and desires to collect).

Companies of all sizes typically implement time and attendance systems to pay employees and track their



work time. However, there's a lot more value in this data than just punch-in and punch-out information. You can track and analyze the data between the punches and use this valuable information to reduce employee turnover, improve business productivity, and help transform business processes.

Small and mid-sized companies: A time and attendance system should address:

- **Basic clocking on and off.** This may be all you want from your time and attendance system—in which case, your needs are simple, depending on how strict your identification rules are.
- **Absence management.** A calendar feature records employee late arrivals and absence trends, which lets managers identify abuses in order to take steps to address them—in part by providing employees with hard facts about their attendance.
- **Reports.** There's a range of reporting details that provide hard information with which to set productivity goals, employee incentive programs, and resource-

**“A CALENDAR FEATURE RECORDS EMPLOYEE LATE ARRIVALS AND ABSENCE TRENDS, WHICH LETS MANAGERS IDENTIFY ABUSES IN ORDER TO TAKE STEPS TO ADDRESS THEM.”**

allocation plans. Attempt to specify what you want to track before you purchase a system. Do you need it for billing clients, estimating pricing, or making comparisons between employees?

- **Payroll processing.** Accurate time and attendance data collection is seamlessly integrated into payroll and HR systems to calculate checks and file all appropriate taxes. Not only does it automate an otherwise time-consuming process prone to error, but it provides an electronic paper trail that can be easily retrieved for the purposes of audits and regulatory reporting.
- **HR processing.** Most benefits are based on the number of hours worked. Accounting for hours automatically determines vacation eligibility, extra time off earned, and other benefits based on hours worked. Time and attendance data also flags attendance problems and provides unchallengeable documentation in the case of personnel disputes and dismissals.
- **Billable time.** Law firms, consultants, and other professional service companies bill clients on the basis of hours spent on a project. Time and attendance systems provide precise documentation on how long these entities have been working on a project.

For larger organizations, time and attendance systems also assist in:

- **HR and growth strategies.** System data must tie in with each employee's role, location, and any special

responsibilities. It's not just the time employees put in, but what they do with that time that can help identify unproductive, time-wasting situations. Time and attendance systems help companies make better decisions about workforce allocation and budgets, thanks to actionable insights about what employees do and how they do it over the course of the work week.

- **Productivity and forecasting.** The system should provide appropriate reports that can help determine current and future staffing requirements, which can provide a clear picture of real-time workforce productivity, what isn't getting accomplished, and how much staffing would be required to complete a specific project.
- **Unique needs.** Certain companies—banks and pharmaceutical firms, for example—must adhere to specific procedures and regulations. These rules dictate the precise information a time and attendance system must provide. Also, large organizations typically cross geographic boundaries, meaning that there may be different local rules for handling wages and employees. There could easily be as many as 300 unique rules that have to be built in to the software to handle various situations.
- **Compatibility.** The last thing you want is a software package that doesn't "play well" with others. The data collected by the time and attendance system is of great value to your other databases and reporting mechanisms—most particularly, accounting and

payroll, benefits administration, and HR management. Make sure they all speak to one another in the same language. Lack of integration with other systems makes it difficult, if not impossible, to get a single, comprehensive view of data—forcing managers to make decisions based on incomplete, inaccurate, and often anecdotal information. This can severely hamper an organization's ability to properly and quickly respond to changing business conditions.



# TYPES OF SYSTEM

**Time Card.** The least expensive option is a high-tech version of the old mechanical punch clock. Employees are issued a time card about the size of a credit card that they swipe on a machine similar to a credit card machine. While data is transferred automatically to produce computer-generated timesheets, thus eliminating all the manual paperwork, the one flaw is the same as the old punch clock: it allows for “buddy punching.” It’s easy enough for someone to swipe a co-worker’s card who isn’t really there. According to the APA, buddy punching accounts for between 2% and 5% of payroll expenses.

**Proximity Cards, Badges, and Key Fobs.** These eliminate the need for swiping. The employee only needs to pass the identifying card, badge, or fob in front of

the reader, without actually having to insert it. In many cases, proximity cards track an employee’s movements throughout a facility—not just check-in and check-out.

**Biometric.** These are pricey systems (the biometric readers are more expensive than the software), but they do eliminate buddy punching because each employee

“SOME BIOMETRIC SYSTEMS USE EYE-SCANNING EQUIPMENT, WHILE OTHERS USE FACIAL-RECOGNITION SOFTWARE.”



is identified via a unique fingerprint or handprint. Some of these systems use eye-scanning equipment, while others use facial-recognition software.

**Web-Based Login Stations.** These are best suited to situations where employees work mostly from laptops or personal computers. A static IP address is triggered every time employees log in to their computers, thus providing a digital “punch-in.”

**Interactive Voice Response (IVR).** This is primarily used by companies with employees working in the field or at remote locations. Employees clock in by simply calling in over a landline or cell phone.



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# TRENDS

**The easier the solution, the more you'll like it. Some of the hallmarks of usability and ease of use include:**

- Familiar Web-type interface
- 24/7 access
- Personalization
- Ability to integrate external content
- Information users want to see—the way they'd prefer to see it

**“SOME BIOMETRIC SYSTEMS USE EYE-SCANNING EQUIPMENT, WHILE OTHERS USE FACIAL-RECOGNITION SOFTWARE.”**

**Everybody is going mobile these days—and your software isn't any different.** The generation entering the workforce today is accustomed to iPhone-like instant access to information, anywhere, anytime. Solutions that fail to incorporate mobile features appear dated and cumbersome, and are likely to result in lower adoption and satisfaction rates. Mobile technology also improves the level of collaboration and communication. Some specific mobile time and attendance applications include:

- Check-in and check-out
- Submitting time-off requests
- Resolving exceptions and responding to employee requests in real time
- Using smartphone preferences to access familiar applications
- Leveraging smartphone GPS capabilities to track punch locations

**Get into the cloud.** The Rolling Stones got it wrong. Don't get off the cloud! Today you've got to be right on top of it. Rather than committing in-house resources, consider using cloud computing to replace the burden of hosting and managing software. The many cloud options that are available today make technology solutions attainable for a business of any size and free your IT staff to focus on implementing other strategic projects.



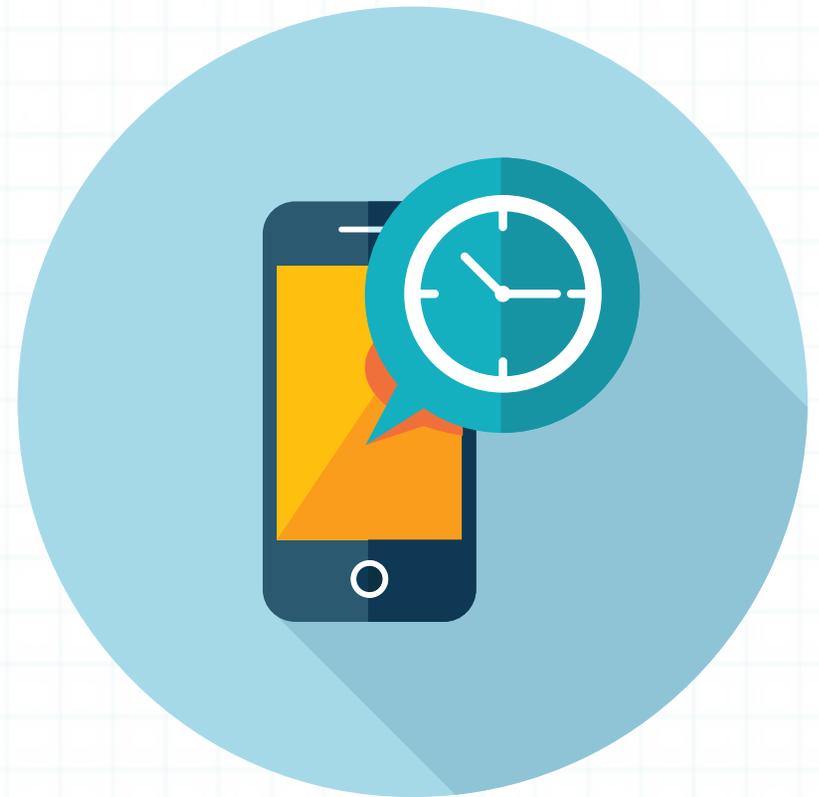
**“RATHER THAN COMMITTING IN-HOUSE RESOURCES, CONSIDER USING CLOUD COMPUTING TO REPLACE THE BURDEN OF HOSTING AND MANAGING SOFTWARE.”**

# CALCULATING COSTS

**There are two major elements: hardware (the clock reader) and software. Biometric time clocks run between \$350 and \$1,000 per unit. Simpler card readers can be as little as \$150, and go up to around \$250. The cards themselves cost about \$20 to \$35 for a pack of 25. Web-based systems, of course, don't have any specialized hardware and can be accessed by a variety of devices including computers, tablets, and smartphones.**

The cost of the software depends on the size of the enterprise. A company with fewer than 50 employees can get a software package for a few hundred dollars. A number of vendors are offering cloud-based systems that work on mobile smartphones, which entail nothing

more than a monthly subscription fee of as little as \$20. There's no software involved, just an Internet-connected computer or smartphone.



**“A COMPANY WITH FEWER THAN 50 EMPLOYEES CAN GET A SOFTWARE PACKAGE FOR A FEW HUNDRED DOLLARS.”**

Larger companies—particularly those with multiple locations—require more sophisticated, and hence more expensive, software. Typically, these systems involve consultants who customize the software not just to suit the companies' needs, but also to integrate into other IT systems. Frequently, these involve monthly maintenance fees in addition to upfront installation costs—at least \$10 per month for basic service and more for larger, more complex systems. Prices can easily reach the neighborhood of \$10,000. And for fully integrated, globally scaled systems, you can get into the six figures. At this level, pricing reflects:

- The features/functionalities of the software
- The number and types of clock readers, cards, badges, or fobs
- The software licensing fees
- Training, installation, and support



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# CHOOSING A VENDOR

**Here are a few general tips to consider when selecting a time and attendance vendor:**

**Who is implementing the system?** Will the vendor have primary ownership (and thus be responsible for maintenance, training, upgrades, and ongoing support)? Or will your IT staff implement and maintain the system (and thus reduce your purchase costs, but at the same time, incur operational costs by devoting your internal resources to owning the system)? The decision depends largely on the size of your staff, your budget, and the degree to which you feel comfortable with a partnership-type relationship.

**Is outsourcing an option?** This could prevent a lot of headaches, free up your staff to perform other activities, and get you up and running faster. On the other hand, it will cost more; and you have to be assured that the vendor can work with your employees, systems, and culture.

**“IT MAY BE BETTER TO WORK WITH A VENDOR WHO DOES IT ALL RATHER THAN WITH MULTIPLE VENDORS WHO WILL PIECE TOGETHER A SYSTEM.”**



**Does the vendor offer compatible payroll and HR systems?** It may be better to work with a vendor who does it all rather than with multiple vendors who will piece together a system. On the other hand, if you're happy with your other automated processes and are just looking to add time and attendance tracking capabilities, seek out a vendor who has a track record of integrating with other systems and technologies.

**Off-the-shelf or custom?** Or maybe an off-the-shelf package with some customized features? If you're not sure what you need, ask prospective vendors to analyze your needs and propose the best solution in terms of how it addresses your requirements, how much it costs, and how it works. Most vendors are willing to demo their product before you buy.

**Do you have industry-specific needs?** A growing trend is for vendors to specialize in time and attendance solutions customized to a particular industry, such as hospitals. You may find that a vendor who already specializes in your industry already has what you want, while a more general business application would have to incur the expense and time of customizing your industry requirements.

There are numerous time and attendance system vendors and resellers to choose from. The comparison checklist below will help you determine what these different vendors may have to offer.



TIME & ATTENDANCE SYSTEMS CHECKLIST

My Needs

Vendor 1

Vendor 2

Vendor 3

This checklist will help you quickly assess the best vendor for your needs.

Features

Automatically Apply Company Rules-  
i.e, Calculate Employee Pay

Compliance With Government Audits

Data-collection Devices (Card Reader/  
Biometric/Web/Proximity)

Efficiency Reporting

Flexible Interface

Incorporate Foreign Languages and/or Regulations

Job Costing

Key Performance Indicators

Labor Budgeting

Labor Planning

Productivity Reporting

Scheduling Software

Support of Flexible Schedules

Track Work-in Process

Visibility of Labor Costs to Management

Pricing

Base Fee

Cost of ID Badges, Cards, or Fobs

Monthly Fees

Per-user Fees

Software Upgrade/Maintenance

Technical Support

Training

# GLOSSARY OF TERMS

**Access Control:** Ensures that information or assets are restricted to certain authorized personnel through the use of passwords, specialized ID cards, and barcodes or biometric (face, eyes, fingerprint) recognition systems.

**Buddy Punch:** When an employee swipes the card of a co-worker who's not actually at work.

**Cold Weather Chip:** Allows safe operation in temperatures below freezing.

**Daisy Chain Connect:** A unit that connects to the Master Clock (the first unit attached to the computer). A Master Clock may have several daisy chain units.

**Employee Lockout:** Restricts or prohibits card swipes for employees not scheduled to work. Locked-out employees receive messages, usually via the reader, of the rejection. Supervisors have the option to manually override.

**Key Performance Indicator (KPI):** Sets a trigger level at which corrective action is indicated when a specified threshold is exceeded—e.g., 40 hours of continual standard work time.

**Remote Worker Tracking:** Software that measures the time and productivity of employees working out of the office. It usually also includes access to on-site resources shared with other employees.

