

Guide to Selecting a Time Tracking Application

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Overview

For businesses looking to automate and streamline processes, time tracking software is one of the best places to start. Payroll is the largest corporate expense. Tracking and controlling time leads to immediate and tangible gains in productivity and cost reductions by increasing operational control, reducing costs and improving efficiency.

ROI – Cost vs. Savings

The most critical factor in selecting a time tracking application is to determine what product meets your most important needs at the lowest possible cost. No system is the right solution for every organization. Low-priced systems save money, but may not meet all your needs. High-end systems may meet your requirements but may also include features that you do not need and will not use.

Begin the selection process with a needs analysis exercise that will help identify current business processes that can be improved by the use of technology. It will also help determine what efficiencies and savings you can achieve by implementing technological solutions. Once your requirements have been determined, you will be more prepared to ask vendors questions that will help you make a sound decision.

The next phase is the investigation process. Be diligent in seeking possible solutions, and in analyzing each viable option to a very detailed level. The more you learn about each application, the better informed you will be to make the right decision.

The final step in the selection process is to perform a return on investment (ROI) analysis. The following is a brief overview of the ROI process:

1. Project an amount for the savings you can achieve by calculating the time saved in hours and multiplying that by the hourly labor rate of the person who is saving the time. Time saved will apply to all

personnel involved in the time keeping process - from foremen in the field to data entry clerks in the office. It will involve such processes as manually computing totals, time sheet review and handling, clerical entry, error corrections, overtime and breaktime processing, and approvals. Convert the savings to an annual basis by assuming 50 work weeks per year.

2. Determine a detailed number for the costs you will incur. Add purchase prices of software, support contracts, training costs, etc. Compute all costs for the first year of operation and then the costs of maintaining the item (support and maintenance) over the useful life of the item.

3. Divide the savings (first item) by the costs (second item) and express in percentage form.

4. Compute the payback interval by determining how many months or years it will take for the savings to cover the costs. This calculation is very important for capital items such as software and equipment that have high upfront costs.

Businesses are much more likely to invest in resources that achieve a timely payback. A good rule of thumb is to be able to recover the costs within no more than 12 months.

Flexibility & Adaptability

Hardware

Hardware decisions can have a major impact on the total cost of the project. Some applications will only run on specific or proprietary devices. The types of hardware that are required or that can be used by an application will be a crucial factor in selecting a software product. Will it run on existing desktops? Can it also be used on laptops, tablet PC's, and/or peripheral devices such as PDA's or smart phones? Can it run on a combination of devices? Some field employees may feel more comfortable with a laptop while others may prefer to use a PDA or smart phone. If peripheral devices are used, are they Bluetooth-enabled?

Software

The more flexible a software program is, the more likely it is to meet most, if not all, of your requirements. In the construction industry, no two companies run exactly the same way and a company's accounting software system will often influence many of the organization's business procedures. Some will require different information to be tied together, i.e. cost codes, phases, and/or pay groups with each job; pay codes with each employee. Some will use different employee pay rates on different jobs or in different scenarios. If you are tracking equipment time, is it included on the employee's timecard or is it tracked separately? Does the application allow you to round hours? Does it allow you to enter actual time without rounding? Are reports set up to include sorting and filtering capabilities that allow users to view data in flexible formats?

Ease-of-Use

The ease with which a new application is learned and used will be a critical factor in determining the success of time tracking software. Sometimes field employees will resist a new software program if it is not easy to learn and use. For field employees with limited technical expertise, simple, uncluttered screens, frequent default options and clearly labeled text boxes will assist in the adoption of a new process. In addition, the number of required user actions should be limited. In most cases, adequate training will help overcome user resistance and concerns, but, in the long run, ease of use will be the key to successful deployment.

Scalability, Security and Synchronization

Scalability

Scalability in a system is a very important consideration when selecting the right application. As a business grows, it will add customers, jobs, employees and users. Will the software be able to absorb the increased transaction workloads and larger databases without a significant drop in performance? Choosing a system with a SQL database will allow companies to expand their business without replacing time tracking programs. Over a network, SQL-based applications will also run much more efficiently because SQL transmits minimal information over the network. As user requests are processed, only the results of the requests are transmitted, allowing for significantly faster performance. SQL transmissions also prevent network bottlenecks as additional users are added to the system. Finally, with SQL databases, the company can schedule back-ups to run automatically at regular intervals to protect against data loss.

Security

A well-designed time tracking application will provide a high level of security with little inconvenience to users.

An SQL-based application also provides a higher level of security. Data is protected from unauthorized access by integrating network security with database security. Administrators can set security at the user level by authorizing user access based upon designated roles.

The right time tracking application can provide even more security. Encrypted passwords can be used to keep unauthorized employees from logging into the system. The system should also include an option to limit, or prohibit altogether, access to sensitive information regarding payroll, customers, jobs, etc.

Synchronization

Moving information to and from the office safely, easily and efficiently is a major requirement for any system tracking time for field employees. There are many issues related to syncing for time tracking programs.

Bi-directional transfer of information

Does the software allow for wireless two-way syncing?

Optimally, the system you select should be able to sync information – like employees, jobs, cost codes and phases – from the accounting system to the remote devices, and vice versa.

Advanced systems will also perform reliable, fast one-way syncs while some less robust systems will only provide for syncing one direction. Data integrity can be compromised and time-savings sacrificed when a low-end time tracking program forces employees to enter new data manually.

Sync methods

The syncing method can make a *huge* difference especially where PDAs and other peripheral devices are used. Programs that use sync methods native to portable device operating systems will sync data, plus contacts, calendar, tasks, emails

and notes. On most occasions, the sync time will take a few minutes. Programs that use more sophisticated synchronization technology will sync only application data resulting in sync times measured in *seconds*. Over the course of a year, the company can realize a tremendous savings of time and money.

Sync security

What happens when, at the end of the day, you perform a sync but the connection is lost before all the data has been transferred? In many systems, the data is lost and will have to be re-entered from memory. A robust time tracking package avoids such a catastrophe by “rolling back” the transaction as if it never happened, retaining the data and allowing a new sync to be completed as soon as possible.

Sync frequency

Being able to sync at will is a great advantage for contractors using time tracking systems. Some programs require that timecards be collected or synced only at the end of the day. Some may require weekly syncing. The ideal solution is for timekeepers to be able to sync whenever the need arises. For example, when a new employee is hired, his employment information is obtained by HR or Payroll. If he is immediately sent to a job site, the foreman can do a one-way sync, and the new hire will be added to the list of employees and a timecard can be generated.

Controls

Data collection

Contractors usually have a couple of options for collecting data with automated time keeping programs. Some systems require clock-in and clock-out dates and times, others accept elapsed time data. The most advanced systems provide multiple methods for collecting data allowing for the use of time clocks, card scanners, badge readers, desktops, laptops, PDAs or smart phones. These systems should be able to use either method as well as any of the devices. Being able to mix and match these devices within one system is an added advantage because users can choose the devices that work best for them

What data is collected?

Are you able to collect the data you need? Be sure to verify that any time tracking program you consider is able to collect, at a minimum, the information needed, including:

- Job number
- Phase
- Cost code
- Employee number
- Pay code

Some time keeping systems allow employees to report Production Counts along with time worked. The most sophisticated systems can base the employee's pay or benefits on this production information.

Daily Logs

Some contractors want to have a record of what is happening at their jobs or projects as protection from liability or as a management tool, without directly relating it to a time record. A comprehensive time tracking system enables companies to customize tracking by building a log of daily productivity measurements, weather, site conditions, deliveries, accidents, meetings, inspections, or any other data that management considers useful.

Other Data

Find a flexible system that captures all the data you currently track and has room to expand as your needs grow.

Most companies track additional useful data, including information that may not be available in their accounting or payroll systems. Leading time tracking applications provide data through the use of user-defined fields. Once set up, these "UDFs" are generally tracked on individual timecards.

Signatures/Multi-level Approvals

Generally, management approves time sheets before payroll checks are processed. If your company uses approvals or is considering it, be sure that you select a system that includes a multi-level approval option. Time tracking systems that provide employee signature and foreman approval options for time cards give employers extra protection from labor disputes.

Overtime/Break Adjustments

Almost all time and attendance software systems will tabulate the total hours that an employee works. The more sophisticated systems can make the following adjustments and calculations:

- **Overtime** - The system can reclassify time into overtime categories based upon user-defined rules, and should be flexible enough to calculate overtime by pay period for all or individual jobs and to use different pay codes for union or prevailing wage jobs.
- **Lunch and break periods** - The system can automatically deduct a specific amount of time from each time record for lunch and/or other unpaid breaks.
- **Rounding** - The system can round time to the nearest unit of an hour.

Audit trails

An advanced time keeping solution will provide a well-defined audit trail. Being able to determine who entered or approved a timecard can be helpful in determining responsibility for transactions. If a time record is changed or edited, knowing who made the change and what the changes were can help resolve disputes over employee time and pay.

Flexible Reporting

Flexible reporting built into a time tracking application can be a tremendous advantage. The ability to sort and filter on a very detailed level allows the company to pinpoint information quickly. A powerful reporting system allows the user to filter by several criteria including:

- Work date
- Job number
- Employee
- Cost code
- Pay code
- Foreman

Flexible sorting can also put the reported information in a more practical format for the user, and can decrease the need to pay software companies to create custom reports.

Data Integrity

Reliable data is an absolute must in any system used in your business. Time keeping systems are no different. You must have total confidence that the data you are using to create time records, and the time records themselves, are entirely correct.

Systems that synchronize both to and from the accounting/payroll applications add that degree of reliability. This dependability comes from two main sources. First, by transferring data directly from the accounting system to the time tracking program, the same information will be available in both systems. Some systems only transfer time records from the field to the office electronically. This means that all the information necessary to create time cards - employees, jobs, cost codes, etc. - must be manually entered into the time tracking application, creating the potential for human error.

Generally, most advanced time tracking solutions build in a great deal of data integrity checking. The initial cost may be a bit more, but in the long run, the savings of time and money, will return that added cost many times over.

Smart client architecture

Users that are looking at mobile time tracking applications, generally have two options:

1. Smart client applications that allow for offline access to important data and provide integration with enterprise data sources for periodic updates.
2. Online-only wireless Internet applications, which provide real-time, typically browser-based content to wireless devices.

The main advantage of smart client applications is providing offline access to enterprise data without requiring a network connection. Offline access to data overcomes problems such as dropped connections, coverage issues, low band-width, and high latency that are typical with today's wireless networks. Also, the smart client model increases battery life on devices, since a modem is not in constant use, and greatly reduces the connection time and costs associated with online-only applications which typically require a constant network connection. A smart client application synchronizes only data that has been modified, greatly reducing the connection time and costs associated with online-only applications.

A construction crew can sometimes be working and lodging in remote locations where Internet connectivity is erratic or unavailable. Smart client application time tracking programs are always available on the remote device, and data can be transferred to the office once a connection can be established.

Professional Services

Proper planning, installation and training

Less sophisticated time and attendance packages can often be installed by using a CD. Advanced time tracking systems normally call for a higher level of services from the software vendor. Vendors will, in most cases, perform a requirements analysis prior to implementation. This will be followed by an on-site visit from a technician who will configure the software and any associated hardware. In addition to installing the software on the office server and on any remote devices, the technician will establish a connection between the time and attendance application and the accounting database, creating a connection from the remote devices to the time tracking system, and mapping fields between the two systems. Once this is done the system will be tested to verify proper configuration and syncing, and the necessary training should be conducted to insure that all users have a good understanding of the software.

Customizations

In order to avoid changing existing business processes, companies may need modifications to a time tracking system. Software can be tailored to specific needs, allowing for more functionality and efficiency. The more flexibility built into the software, the less customization will be required. Companies can sometimes mitigate the cost of customization by requesting that the changes be incorporated into the next version of the software. If sufficient numbers of users or potential customers will benefit from the addition, the vendor may

include the new feature at no cost in a future version. If the prospective customer needs the add-on right away, the vendor might consider sharing the development cost of the project with the prospect. If the vendor determines that the modifications required will not benefit a sufficient number of customers, then a customization will be required and the vendor should provide you with a quote before continuing.

One thing to keep in mind about customization – it almost always increases the difficulty of upgrading the software, and in doing so, increases maintenance costs. Always explore all options before addressing modifications. Human nature causes us to resist change, but on some occasions, change can result in process improvements. Be sure you can justify the superiority or uniqueness of the existing practice over the procedures built into the new system. Try to keep customization to a minimum. It will be less trouble and less costly.

Technical support

Technical support is a vital component for any time tracking application. Good technical support will produce happy, productive users. Support should be available by phone or email. Although you cannot necessarily expect instant service, in most cases your request should be addressed within 2 – 4 hours. The time required to receive a resolution will depend primarily on the complexity of the issue. Simple issues should normally be resolved relatively quickly. The customer can assist in finding a solution by providing as much data as possible in advance.

The manner in which technical support is delivered is another point to consider. Providers with more sophisticated tech support departments

will have remote support applications that allow them to do live troubleshooting by connecting to your system. This feature can significantly reduce the resolution time.

Summary

As technology advances, more and more companies will adopt field service applications such as time tracking, equipment tracking and more. As the wireless infrastructure improves and the technology becomes readily available and more affordable, the number of adopters will increase. To derive the most benefit, a company considering the purchase of a time and attendance tracking system should develop a plan for purchasing, implementing and using these systems.