

## A Journyx White Paper

# Best Practices for Time Tracking

### Introduction

There are many reasons why a company may need to track time. Each company's reasons for tracking time will have large impact on the details of their own best time tracking solution. Your ability to implement these best practices will be constrained by your overall level of corporate systems sophistication. Only a trained and experienced professional consultant can accurately sift through the general best practices to design a specific successful solution.

Tracking and reporting on time allocation is a business process that is often underestimated in its complexity. Instituting a time tracking system is a business process change that can affect existing business processes. It is impossible to fully predict the ramifications of the change. Starting to track time, no matter the reason, is a big step towards corporate cost accounting maturity. As your company evolves, you will find that you have new questions that you need more or different time data to answer.

This document outlines the path to success and points out several potential challenges that line the way. No company is going to be able to perfectly follow this path laid out here. This document will give you a head start towards dealing with the issues you will encounter when you have to compromise.

### Summary

- You have one big question that you need answered in order to improve your business.
- Time data is the key to answering that question.
- Everyone needs to know what the question is, and what the company is going to do once the question is answered.
- Start with designing reports that answer the question.
- Configure the time tracking system to fill in those reports.
- Ask the time tracking system to do as little else as possible, at first.
- Your data needs will change as your company matures, and you will have to change your time tracking system to answer new questions.
- Keep the data entry as simple as possible for the end users.
- If you have a potential exempt/non-exempt employment issue then use the time tracking system to monitor compliance with your HR policies.
- Start with a pilot program, and respect the pilot group's recommendations for the system.
- Take the quick win—don't wait to roll out the system until every "i" is dotted.
- Integrate the time tracking system with other related systems, only when those systems are reliable.

## Why Track Time?

### THE Question

Your company's need for tracking time is of utmost importance to this project. Time data is always the answer to a question. You should have one primary question that you are looking to answer with time data. That is your Question. We will refer to it often in this document.

This list of potential questions is not exhaustive, but it should give you a better understanding of the context for this document.

- What are we actually working on?
- How much should we bill our customer?
- How much are we investing in a project?
- Which of our current projects are losers that we should stop working on?
- Which of our current projects are winners that we should invest in?
- How much have we had to invest in similar projects in the past?
- What was the development effort value that we need to start depreciating?
- What resources will I need to complete a project like this?
- How long does it really take for us to complete a project like this?
- Which of our projects are profitable?
- Which of our customers are profitable?
- Where are the bottlenecks in our operations?
- How far off are our work estimates?
- How much should we pay each employee?

### Companies Change

The question you are asking today is not the question you will be asking tomorrow, or next week, or next year. As you gain answers to your current question and implement changes based upon those answers, new questions will arise. The old questions don't go away; they just become ingrained habit and part of your corporate culture.

Your company should be growing and improving its internal processes, and this series of new questions is a good sign. No two companies are exactly alike, but there are general trends that are consistent across companies that employ knowledge workers.

At Journyx we have developed our own corporate maturity model as it relates to time tracking. We call it the P5 Protocol: Per Person, Per Project Profitability. You can read more about it on our website at <http://www.journyx.com/products/p5.html>. This brief synopsis should help you understand many of the best practices to follow, because the best practices take into account where you are and where you are headed in terms of P5 corporate maturity.

### P1: Chaos

You are overcommitted. You have very few processes, and don't often follow the ones you do have. Every project is a one-off. You cannot repeat your past successes.

### P2: Transition

You track most direct labor on projects. You start to understand what each project costs. You start to understand the project life cycle.

### P3: Structure

You track all direct costs, including time and expenses. Your project costs include some variations based upon the pay (or pay grade) of the workers.

### P4: System

You track all indirect costs and allocate the indirect costs across your projects in a reasonable manner. Your project life cycle is well documented and understood, and rarely deviated from.

### P5: Order

You have a clear process for project life cycle deviations. You can make accurate profitability, scheduling, and resource needs estimates on proposed projects, based upon analysis of past similar projects.

If your company is in chaos or transition then you should not expect to be able to implement all of the best practices. Many new Timesheet customers are in those stages. That isn't an excuse for skipping a best practice. You won't be able to do everything at once. But if you recognize the goal and prioritize your work towards that goal, you can make significant progress towards improving your company.

## The Four Cornerstones

The real value of your time data is its accuracy and completeness. We all now understand the inherent dangers in making important decisions based upon faulty data. These four guiding principles speak directly to the accuracy and completeness of your data. The best practices, which will follow, are practical applications of these four cornerstones.

Employees often see time tracking as a voluntary or optional function. Even if you clearly make time tracking mandatory, you will get more accurate and complete data if your employees "buy in" to the system. Thus the first three cornerstones all relate to the way employees view and feel about the time tracking system.

1. Everyone has to know what question you are trying to answer, and why.
2. The process of tracking time has to be easy.
3. Dedication to time tracking has to start at the top of the organization.
4. Recognize the limits of your information.

### 1. Everyone has to know what question you are trying to answer, and why.

You are trying to improve your business. You probably have a hundred ideas of things that you could do that might improve your business. But you have chosen to focus

on one or two specific changes that you can make that you think will give you a great return on your investment. And you need data about how your people spend their time in order to actually make the low-level decisions and make the improvements.

Everyone involved in the implementation process and the ongoing maintenance of the system must understand that question, and understand why it is important. If your own implementation team doesn't understand the question, then you will end up with a system that doesn't answer your question.

You have hired whom you have hired because they can do their various jobs. At some level you trust them to do what is right for the company. If you are considering time tracking then you are almost certainly managing "knowledge workers", and so they should be able to understand basic business principles. When you roll the time tracking system out to them and ask them to track their time, tell them why. "Because I'm the boss, and I said so" doesn't carry very far in knowledge worker organizations. But if the time data will genuinely help you run the business better, then you are better off if the people who are creating the data understand the purpose. In fact, the better that they understand and accept the purposes for tracking time, the more they will take ownership of the process and ensure that you get the data you need.

## 2. The process of tracking time has to be easy.

Tracking time is an overhead task that no one enjoys. That is enough drag to kill the whole process if your staff doesn't understand why you need the time data. If it is difficult to track time then you will almost certainly get incomplete and inaccurate data.

Also think in terms of how much time will be spent on this overhead activity. The easier you keep the process of tracking time, the less overhead time will be spent by the organization. A savings of one minute per day per person will add up to significant savings in the long run.

If your operating plan is for people to call someone to get access to the projects that they need to track time to, then your plan is designed to collect inaccurate data. On the other side of that same coin, if your plan is to have each person wade through tens of thousands of projects to find the right one, then your plan is designed to collect inaccurate data.

There is an inherent amount of complexity in any system. The type, nature, and amount of complexity vary greatly from company to company, and from question to question. You should plan to manage the complexity behind the scenes as much as possible, through system administration and integrations.

## 3. Dedication to time tracking has to start at the top of the organization.

What is the question that you are trying to answer? Who needs that answer? That person is the real executive sponsor of your time tracking initiative. As long as that person asks for, looks at, and uses the data, then most everything else will work itself out.

When the senior executive asks, “Where is the data to answer my question?” that usually rolls down hill appropriately.

If you want to ensure that your staff gives you accurate information on time, then the right report is “This is how our department answers the senior executive’s question.” And it should have the senior executive’s name on it. If the staff knows that the senior executive will be looking at this week’s numbers on Wednesday of next week, then the sheets will come in.

#### 4. Recognize the limits of your information.

Quantitative data always has both a level of precision and a margin of error. If you need to know the height of a building then the cost of obtaining that answer is a direct result of the level of precision that you need and the margin of error that you can accept.

- You can get a ballpark guess with a wide margin of error for free in most cases.
- You can probably get a record search of the architectural drawings for a few dollars, to get you within a few inches.
- If you need an answer that is accurate to within an eighth of an inch, then you will have to get some more exotic measuring instruments, and your cost will go up.
- If you need an answer that is accurate to within a thousandth of an inch, then you will have to invent some new technology to get that measurement, and your cost will be very high.

Time data is quantitative, and is subject to these same limitations. The question that you are answering should tell you the range of appropriate costs, the level of precision, and the margin of error that you can accept. Don’t overspend to get a smaller margin of error than you actually need. Don’t under-spend and end up with data that is not accurate enough to answer your question.

Time data is often dependent upon data from other systems. Every inaccuracy in that inherited data will be magnified by inaccuracies in the time data. Many companies have to spend significant efforts cleaning up their HR data or their project portfolio data before they can get the analysis that they want from the time data. The good news here is that you can start tracking time now, and then simply re-categorize projects or staff later based upon the cleansed data from the external systems.

## Best Practices

These recommendations are general. Your question is specific. You will have to adapt these general recommendations to fit the specific needs of your business.

Many of these best practices will directly reference features of the Timesheet application. In almost every case the egg came before the chicken—we only added the features after enough customers convinced us of their value.

These recommendations do not contain specific instructions on how to accomplish each task. Every listed task is doable within Timesheet, except for those tasks that are specifically stated as being outside of the system.

## **Publish Your Question**

You need to let your people know why the time data is important. You should communicate this in depth when you roll the system out. It should be included in the new employee training process.

There are many places within Timesheet where you can include short notes that help remind people why the data is important. You can modify the text on the login page. You can add text to a bar that appears across the very top of every page.

You can add a short paragraph above the time entry grid. You can also add a second short paragraph below the time entry grid. You might want to describe the senior executive's current question above the grid, and the direct manager's current question below the grid.

Those two paragraph spaces can even vary for different sets of your employee population. Those paragraph spaces can also be used to remind people of your time tracking policies and expectations, like "remember to track any activity that you spent more than 15 minutes on."

You can create reports for end users and managers. The names and configuration of those reports will communicate a lot. Each report can also contain a paragraph header and footer. If, for example, you create a report for all front-line managers called "Budget vs. Actuals" that said in the header, "You will be called upon by your boss to explain projects that go over budget", then you have gone a long way towards getting your front-line managers in synch with your question.

You should be using the approval process, and therefore sending approval emails. The subject line and body of these emails are customizable. So you can alter the text of these emails to remind people why the time data is important. The more specific the text of the emails, the more effect it will have. For instance, "You are about to be on <insert senior executive's name> naughty list" is a much more effective email subject than "Your timesheet for 06/21/2006-06/28/2006 is late." The body of that email should remind the person what day the senior executive looks at the report, and what question she wants answered.

## **Design Your Reports, for the Entire Org Chart**

### **Goal Reporting**

Each level of manager needs to know what they are expected to manage for. If the senior executive is looking at the profit per project then everyone else needs to be looking at the cost that their group is contributing to each project. That might require

project budgets per department or team. That might require reports that cover only a subset of the project phases for each manager. Middle-tier and executive managers will need to see summary reports that break down the data by each of the groups under them. Before you start tracking time, or before you start changing the way you track time, you should at least outline the reports that each manager should be looking at and managing from. When you roll out the system you should train those managers on the reports that you designed for them. Within Timesheet you can easily create all of the reports you need, and then copy them out to just the people who need to use them.

### Access and Security

You should also consider who can report on whom. In many companies it is necessary to compartmentalize information and keep each manager from reviewing the data on people whom they don't manage. At very least it is usually important to keep people from reporting on their boss or their boss's boss. Timesheet has security features in the Groups and Roles features that let you accomplish this compartmentalization.

Even if you have a general policy of openness and don't need to prohibit managers from reporting on people whom they shouldn't report, you can use the same security features to make it easier for managers to run their reports. When they only have access to report on the people whom they should be reporting on, it is much easier for managers to always get their reports right.

### Approvals

The simplest and most important report is the full timesheet itself. This is the most important reason to use the Timesheet approval process. Each person's direct manager should review and approve their timesheets each period. It is important that the managers not simply check to see whether or not the sheets are filled in. The managers need to question whether or not the sheets are reasonably accurate. The manager needs to ask if every project that the person worked on was billed a reasonably accurate number of hours, and if the hours are filled in correctly—the correct task, activity, pay type, bill type, or whatever other fields appear on the timesheet. If the accuracy of the data does not get checked here, then the overall accuracy of the data is suspect.

Using an approval process brings other benefits that are not directly related to reporting. Approval processes are the root of the reminder emails in Timesheet, an important feature for getting sheets in on time. Submitting a timesheet for approval locks it so that the person cannot make further edits. You are generally going to be looking at reports of data more than 1 week past, and having those sheets approved and locked is your best guarantee that the data won't change out from under you unexpectedly.

### Submission

Assigning direct line managers to approve timesheets is dramatically better than skipping the approval process. But if you are unable to implement a full approval process, then getting the sheets submitted is the second best solution. Submitting the sheets locks them from being changed and lets you know that all the data you are going

to get for the period is in. You can have all sheets submitted to a single administrator and let them manage the process of following up with late people.

### External Reporting

Timesheet has a flexible and powerful internal reporting engine. But you are encouraged to implement external reporting and exports of data to other systems.

If you are hosting your Timesheet server on your network then you will be able to simply make a direct ODBC data connection to read directly from the Timesheet data tables. Your Timesheet maintenance contract covers basic questions about external reporting. The Journyx Support Team can provide you with a map of the tables and a thorough advice and suggestions document.

If Journyx is hosting your Timesheet server then you will need to speak to the Journyx Professional Services Team about getting an extract of your data for external reporting.

### Classifications

Within Timesheet you can easily create attribute fields about your people, projects, and other data elements. You can note the location, branch, department, recruiter, salesperson, or any number of other attributes. Each classification that you implement incurs an initial effort cost and requires some level of effort to maintain. Many customers have recognized the ease with which they could add classifications and the value that they add to ad hoc reporting, and underestimated the effort required to maintain the classification data. Each field that you add needs to come with a plan and process for how the data will be maintained. If you can't maintain it at a reasonable cost, and it isn't critical to answering your question, then don't put it into the system in the first place.

After you have been using the system for an extended period you will learn amazing and important things about your company that you never suspected, based upon the extra classification data that you enter. We have heard countless stories of serendipity when a customer learned something critical about their company by looking at their data in different ways—based upon alternate classifications.

We have also heard several stories about companies making important decisions based upon errant reports, where the classification data was woefully out of date. In most cases the classification data will not give you any warnings that it is no longer correct; the rare exceptions being situations like when staff members are still assigned to locations that have been closed. So if you do not proactively manage the maintenance of that data it poses a potential for tripping you up.



## **Keep Data Entry Simple for the End Users**

### **Frequency and Lag Time**

If your company works on US Federal Government contracts then you are subject to the DCAA auditing requirements. One of the DCAA auditing requirements that relates to time tracking is that time must be tracked every day. The DCAA instituted this requirement because they understand that if you wait to track your time then you will forget the details and the time data will be less accurate. Even if you are not subject to DCAA audit requirements, minimizing that lag between work and tracking will improve the accuracy of your data.

Daily entry is the best goal for most organizations. Every employee tracks their time for the day just before they leave. Weekly entry is a reasonable alternative. If you ask each employee to enter their week's time before they leave on the last day of the week, then you will get much more accurate data than if you let them wait until the start of the following week. Many customers report that Friday afternoon is a much better time for weekly time entry than Monday morning. Timesheet defaults to a period view, but offers each employee the option of viewing a single day at a time, in order to encourage daily entry.

Lag time greater than a weekend reduces the accuracy of the data. Entry on a less frequent basis, bi-weekly or semi-monthly, significantly reduces the accuracy of the data.

You might perceive that asking for shorter lag times or asking for daily entry is a greater burden than letting time entry happen less frequently. The reverse is actually true. Entering a large amount of time at once, over a large time period, and after a long lag, is a frustrating process of racking your brain or pouring through notes and calendars to remember what you did. When you go through that there is also the added frustration that you really cannot do a good job—enter accurate and complete time—just because you have forgotten the details. Our experience is that people who truly hate time tracking have only ever tried to do it in large late blocks—spending 3 hours trying to enter records for the month before last. By contrast, daily entry usually only takes a few minutes, and can often be done without referring to notes or calendars.

### **Keep it Simple**

Every piece of data that you ask a person to fill in increases the amount of time that it takes them to do their tracking. Every option that you give them—selection in their selection lists—increases the amount of time that it takes them to do their tracking. Timesheet is a flexible program that will let you configure the entry screen in many ways and control how many selection items each person sees.

Timesheet allows for a maximum of 5 data elements for each time record. Those elements show up as columns on the entry screen. You want to configure the application to use as few of those fields as you can, and still get the data you need to answer your question. Customers who implement more than 3 data elements report that they have a more difficult time getting accurate data. You can also rename those fields, and you want to give them names that your average employee will instantly recognize.

You can use the Groups and Dependencies functions within Timesheet to limit number of choices that each person sees in their selection lists. This is a place where every minute of administrative work that you invest in the system pays large dividends in making the entry process easier for your people. The goal is to give each person access to only the items that they might actually work on, and not one item more. However, not giving them access to an item that they need is a much greater problem, so you should plan your administrative processes to err on the side of showing too many items.

If you have a good system (either manual process or an external software application) for assigning project to people, then you can greatly simplify the time entry process by creating Memorized Time Entries (MTEs) for your people. An MTE is basically a pre-selected time record, similar to a “favorites” list. It can be partially pre-selected, so that the person can still enter a comment or specify the type of work they performed. Timesheet also provides each person with the option to have the previous period’s (or multiple periods’) entries be automatically populated as MTEs on the current time entry sheet. This is the Timesheet features that people often rate as the most helpful.

If your list of projects does not change very often, and people tend to work on the same project for long periods of time, then your people can use a feature called My Project List to narrow down their project selection list for themselves. If your people use this feature then you will need to externally notify them of new projects, because the My Project List feature will stop them from seeing new projects in Timesheet until they add the new projects to their My Project List.

### New Projects

You may call them Work Orders, Tasks, Activities, Jobs, or Matters. They are the things that your people work on. They are the most changeable element that your people track time to. If you are inconsistent in how you name them then your people will waste a large amount of time searching for them. Your Timesheet implementation plan needs to account for the process of creating new projects, and define naming conventions for them.

The field in Timesheet where you will enter these items has a built-in hierarchy. This allows you to define a relationship between items and build a structure that can serve as a map to navigating the list of items. Your item list will be very specific to your company, but to the extent that you can organize the items in a recognizable hierarchy you will make time entry easier for your people. If there is no natural hierarchy for your projects then do not invent one for the purposes of time tracking.

If you have another application, like a billing system or a project management system, then you would be well advised to get the item information directly from that system. That might involve contracting our Professional Services Team to build a custom integration for you. Or it might involve simply getting a data extract from the other system and importing your items into Timesheet using the existing import tools.

Manually creating projects is definitely the third choice because data entry errors cause extended confusion and undermine the quality of the time data.

### Entry Format

There are four basic formats that you can have your people use when entering their time. The most common two formats are the easiest and provide an adequate level of precision for the large majority of Timesheet customers: HH:MM (5:30) and decimal (5.50). You should use one of these two formats unless you have a pressing need for one of the alternatives.

One alternate entry format is percent entry. This has people enter what percent of their work time was spent on each project. The system then assumes X hours per day and converts their percentages to hours accordingly. You get to define X, and thus control that assumption. But you end up with data that is only genuinely valid for certain comparisons like, “did we spend more time on project A or project B?”

The other alternate entry format is start/stop. This has people enter the time that they started working on something and the time that they stopped working on it. Oftentimes, the real-world net effect of utilizing start/stop entry is that your people will bill all of their time to projects and not give you a good accounting of time spent on general activities. For example, they may not log their breaks as such. Instead, they will tend to over bill the projects before and after their breaks so they can account for that time. This relates to the level of precision and the margin of error that you can accept.

### Conveniences

There are a few convenience features that you can use to make the overall process of time tracking simpler for your people. Each of these require resources and administration to establish, but provide good return on investment in terms of making time tracking faster and easier for your people.

You can implement a tool that allows people to enter their network login and password on the Timesheet login page. This reduces the number of passwords that your people need to remember, and it reduces the incidence of someone having to reset a people’s password to Timesheet.

If you have a secured internal portal—a portal that your people log in to—then you can implement a tool that allows your people to skip the Timesheet login page when they click the link from within the portal. You can also edit your portal to create what is called an “iframe” where you can embed the time entry grid—so each person will simply see their time entry grid right inside of your portal page. The portal page integration is an included feature of Timesheet, but it requires the use of a single sign-on module.

### Training

When you roll out the application you should train your managers and end users. If your system is well implemented, and the fields and items are all named recognizable names, then you don’t need to show the application as much as you need to explain the

policies and procedures. The one part of the application that you may need to go into in depth is the reporting engine. And you should only need to cover it with managers whom you expect to do ad hoc reporting.

## **Pilot Program**

If you have more than one hundred employees who will be tracking time then it will serve you well to conduct a pilot program before you roll the application out to everyone. You will want to involve every department and get participation from a few power users.

Our experience is that it is very difficult to predict the wants and needs of a large set of people. For our customers who have executed pilot programs, every single one of them learned something from the pilot group's feedback that they did not expect.

In the vast majority of cases the feedback from the pilot team was that the user community was significantly more accepting of little things than the project team expected them to be. The common quote from pilot teams is "Oh that? No, that's fine the way it is."

Pilot teams will often come back with one or two points of feedback that they consider very important. Every customer we have ever seen ignore that feedback has significantly regretted it. It is always difficult to predict what those one or two points will be, and that is why you need to go through the pilot program exercise.

## **Do the Minimum Up Front**

Whether you do a pilot program or not, you will probably start this project with a laundry list of features and functionality that you would like to see. Prioritize. Only do the absolutely critical things before you roll out. Let the rest of the list wait. You will almost certainly find that the large majority of the items that you don't do up front never really needed to be done.

You might not have a single overarching question. You may have several related questions, or several departments asking their own questions. You will be well served to prioritize and focus on the most important question or questions first. Your time tracking system can evolve to answer many questions simultaneously, but focusing on one at a time will dramatically increase your odds of getting the answers you need.

The implementation projects that rolled out the fastest and with the minimum of costs all approached the project with the attitude that the system would be in a perpetual state of change and improvement. You can't predict the future. You can't control everything. Whether you want to right now or not, at some point you will make changes to your Timesheet system as your question changes.

The message to your people should be that the system will be growing and changing as our processes and needs change, and that you will notify them before implementing any major changes. Give out the contact information of the person who maintains the suggestion box, and implement the good ideas that come along.

Doing the minimum up front also helps the project gain some success and traction. People will see that the system is important when the data is used to make decisions and take action. That specific type of success dramatically helps with adoption.

Doing the minimum up front, and altering the system over time, helps your people accept the system in small bites. Give them a very simple time entry screen at first, and then slowly add new levels of detail. This lets them adjust to the system slowly, and greatly improves their overall acceptance of the system.

## **Integrate with Other Systems**

If you have a good HR system that is authoritative for your employee list, then it will save you time in the long run to integrate Timesheet with the HR system. If you have a good project management system, then integrate with it and let it create and assign projects in Timesheet. If these systems are not reliable then don't integrate them until you can get them stabilized.

In an integrated environment there should be only one authoritative source for each type of data. For instance, there should be only one system that controls data about people. There should be only one source for projects.

Importing projects from a project management or project portfolio management system is much better than hand-entering projects into the system. But importing both the projects and the assignments is significantly better. The best assignments are always assignments to individuals. But even group (team or department) level assignments are better than no assignments.

Several large customers have used the Timesheet system as the middleware that finally got their HR and project management systems communicating. A few customers have also used Timesheet as a middleware to coordinate two or more separate project management systems. We have done this successfully before, and we expect to do it again. But it is important that you recognize the scope of what you are attempting before you dive in. In these situations it is imperative that you design all of the integrations before you begin tracking time. You don't necessarily have to implement all of the integrations before you start tracking, but you need a thorough design of the integrated systems before you start tracking.

## **Document Your Processes**

After the system is in place and working, spend a little time documenting the processes that surround the system. How do projects get created? What do we do with

terminated employees in the time system? Where is the question integrated into the system?

Employees leave. Systems change. This documentation will keep you functioning and provide a starting place for making system changes in the future.

## **Perform Backups**

Backups should go without saying on any software project. But we have seen an inordinate number of professional organizations lose years' worth of time data due to a crashed hard drive. You should not consider your time tracking implementation project complete until you have conducted a test restore of your nightly or weekly data backups.

If we are hosting your Timesheet site, then you can rest easy because we conduct nightly backups of all hosted sites. We also conduct regular restores of those backups to ensure their validity.

## **Additional Details**

Journyx's Professional Services Consultants have dozens of years of experience in implementing software in general and Timesheet in specific. There are hundreds of minute details that were omitted from this document for the sake of brevity. Our consultants can help you dig deeper on any of these topics and help you develop a time tracking solution that will work long-term to answer your current and future questions.

## **Revision and Document Ownership**

This is document revision 1.1. This revision was published on December 4, 2006. The current document owner/editor is Randy Miller, Director of Services. Randy is available at [randy@journyx.com](mailto:randy@journyx.com) or 512-833-3270.