The Timesheet Approvals Challenge

Matrix Approvals with TimeControl®

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Table of Contents

What would possess intelligent, organized people to implement more than one timesheet in their organization? It's no secret that employees aren't enamored of doing a timesheet so why would we ask them to do two, three or even more at the same time? What would prompt otherwise rational people to supporting multiple entry of a chore that no one looks forward to at the end of the week?

The issue of time collection is highly topical. Collection of time and attendance records goes back to ancient times but in today's faster-moving, more challenging economy, time and attendance alone is insufficient to manage an organization. Knowing when people worked is important but to be effective, knowing what they worked on is essential.

When selecting a timesheet that can fulfill multiple purposes at once, the challenge intensifies.

Selecting a timesheet based on the look and feel can be deceptive. Most timesheet entry screens look the same. It is once the timesheet data has been entered that timesheets can be very different from each other. Each use of the timesheet system dictates a different context for the data and a different workflow for approvals.

Over the next few pages we'll look at the challenge of selecting a timesheet that can be used for multiple needs at once and overcoming the "Approvals Challenge" that is inherent in such a system.

When organizations choose multiple timesheets it is inevitably because different aspects of the organization require the collection of labor spent for different purposes. Here are some of the most common timesheet categories:

Time and Billing

Time and Billing systems are most commonly used for professionals such as lawyers, accountants and consultants but are also often found within large organizations for internal chargeback of hours between departments. The basic purpose of a time and billing system is to capture hours, apply rates to those hours and then generate and justify invoices to clients. The key element of each detail item is the client identifier. Most time and billing systems allow for a descriptive element. This is to ensure that there is enough information to justify an invoice for each period. Terms such as "project" and "task" are common in such systems but they are usually best thought of as qualifiers for an invoice rather than a pre-determined set of tasks each with a schedule, budget and scope.

Time and Billing systems are often driven by per-client rates rather than per-employee, or per-project rate schemes.

Time and Attendance

Time and Attendance timesheets are the most prolific type of timesheets on the market. They are typically delivered as part of the Human Resources (HR) system or the Payroll or ERP systems. Time and Attendance systems focus primarily on how much time you have spent working for the organization during a particular period and whether or not you should be paid for this time. They usually allow for the entry of whether or not an employee worked, whether special pay is required for example for overtime, exception days such as holidays, vacation or, sick leave.

Time and Attendance timesheets are divided into two types of entry: Positive-Entry or By-Exception. A Positive-Entry system requires each employee to complete his or her timesheet for a given period. A By-Exception system requires a timesheet only for recording absences with the reason for the absence.

Human Resources exception timesheets

HR Departments will also often require a timesheet to track time spent out of the office on "exceptions" to being present. This is sometimes done as part of the payroll's time and attendance system and sometimes done distinctly. HR is often tasked with tracking the entitlements of employees such as remaining sick leave, vacation time, personal time off or other such time and ensuring that policies regarding the time allotted and time taken per employee are respected.

Task-based, Project-update timesheets

These days, almost every project scheduling system includes some kind of timesheet entry. These interfaces are designed to allow end-users to enter time against any activity. The data, once entered, is used to update the activity's resource progress. There is often some level of project-manager approval commonly referred to as line-item approval.
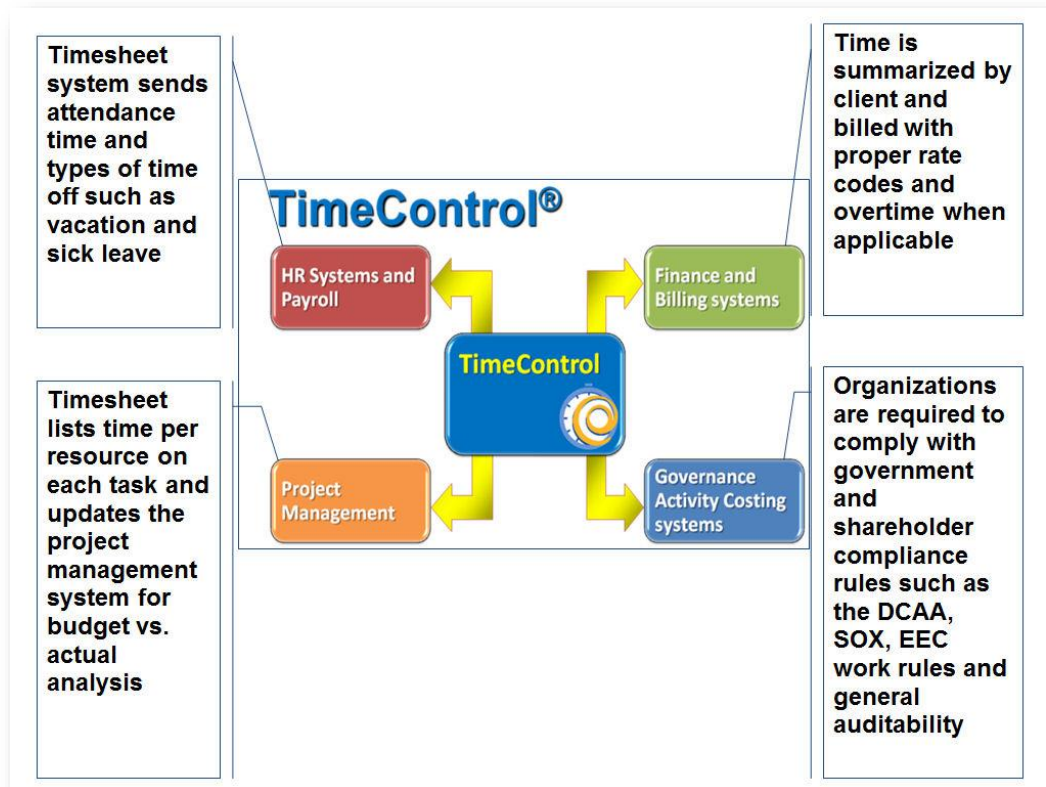
For many project management environments, this type of timesheet is all that is required. However, these timesheets and the architecture used to produce them are rarely sufficient for financial purposes. It would be unfair to characterize this as a deficiency of these systems. The first thing to remember is that most project management systems are, by their very nature, forward-looking analytical tools. For a planner, the actual-hours per task is only interesting to the degree it reveals the future. A planner, for example, might elect to delete a task from a project. Perhaps future plans have changed and no additional work will be done on that task. Or, perhaps the task will be replaced by two or three other tasks which have been now defined in more detail. No problem for the planner, they are only interested in what will happen in the future. For anyone interested in historical data, however, there may be more of a problem. In many project-update systems, the loss or change of an activity means the automatic removal of any data linked to that task. Even if data is not deleted, the financial controls such as post-period adjustments, financial approvals, and business rules compliance are rarely managed within such systems. Even simple functions such as determining if all timesheets have been entered are often not supported in such a system. This makes project-update timesheets best suited when only the project data must be updated.

Multi-purpose timesheets such as TimeControl

For some organizations, there is a desire to collect time in a single system and then use it for multiple purposes across the organization. HMS Software's TimeControl is such a system.

TimeControl is a highly flexible timesheet system which can be configured to collected data at the task level and configure the various tables and elements of the system to allow that data to be validated, costed, approved and audited with an intent that the data will ultimately be returned to multiple systems including project management, finance for job costing or invoicing, human resources for vacation management and payroll. TimeControl must include the financial controls which allow their data to be Finance quality and the facility to be integrated

Timesheet system sends attendance time and types of time off such as vacation and sick leave

Time is summarized by client and billed with proper rate codes and overtime when applicable

Timesheet lists time per resource on each task and updates the project management system for budget vs. actual analysis

Organizations are required to comply with government and shareholder compliance rules such as the DCAA, SOX, EEC work rules and general auditability

directly into the financial, human resources system as well as project management systems. Timesheets can be implemented for individual departments, for small to medium sized business or in a large-scale organization. TimeControl was designed for businesses where there is a need to determine not only how much time has been spent but what that time was spent on.

Because TimeControl includes both the ability to link to a project-management system and the financial controls which allows the Finance system to accept their data, they can be used to fulfill the needs of time and attendance, time and billing and project-update requirements at the same time.

Why do timesheets at all? What are the benefits?

Why bother with a timesheet system at all? There are several good reasons to automate timekeeping:

Eliminate errors

With manual timekeeping systems, the opportunity to introduce inaccurate data is enormous. Users can easily mistype information or not look up correct codes or not have the timesheet add up properly or simply enter work as "miscellaneous". All of this increases work downstream when data must be reconciled in Finance, Human Resources, Project Management and for management metrics.

Improve management reaction time

With timesheet data entered directly into an automated system, turning data into reports, dashboards or links to move the data into other organizational systems becomes much easier and much, much faster. One of the biggest attractions of automating the timekeeping environment for project managers is access to labor actuals in a more timely fashion.

Reduce workload

With an automated system, controls can be created to trap typographical errors, validate business rules and reduce other inaccuracies in the timesheet while it is being completed. Also, when data is entered by the person doing the work, there is no need to re-key a manual timesheet into the computerized system.

> According to recent research by Gartner Inc., savings from an enterprise solutions that automates time and attendance as well as scheduling can reduce labor costs in enterprises with a large percentage of hourly workers by 5% or more. To illustrate, an organization with 1,000 hourly employees each being paid $30,000 a year would recognize approximately **$1.5 million** in labor cost savings annually!

Ensure that hours are not lost

In any manual timesheet system, it is difficult and costly to establish checks and balances to ensure that billing data is all captured completely and accurately. An automated timesheet can provide reports that compare expected billings with actual billings and identify any un-billed hours for scrutiny by the billing department.

Provide the "actual" element of variance reporting

Project-oriented systems often provide some type of variance report. This kind of report shows the actual progress to-date against the original plan. While the planned progress is usually maintained in the project system, the actuals must come from somewhere. Automating the timekeeping environment provides the project system with the progressed element of the budget vs. actual report.

Improve auditability and transparency of timesheet data

In today's world of increased scrutiny, good governance and governmental controls, an automated system can enable an organization to more easily comply with auditability standards required by government programs such as the DCAA, European Work Rules, FMLA, Sarbanes Oxley or take advantage of R&D tax credits or other government incentives.

Organizational hierarchy vs. Project hierarchy (OBS vs WBS)

Historically, organizations have followed a hierarchical structure. A founder or leader would look to trusted assistance, usually from within their own family to manage a sub-division of the business as the organization grew. Until the 1970's this was considered the best way to manage a growing enterprise: divide and manage, subdivide and manage, subdivide again and manage each part. The advantage of such structures is that management is easily identified. The management structure is hierarchical and thus each person has only one supervisor.

Modern times moved the organization faster and faster and faster. Run times and the product lines or the projects they represented became shorter. In many industries, it became commonplace to be working on numerous projects or products or initiatives simultaneously. In 1971, an article in Business Horizons by J. R. Galbraith entitled "*Matrix Organization Designs: How to combine functional and project forms*" sparked a drive towards what is now widely considered the most popular organizational management structure.

A matrix organization is set up in two dimensions. On one axis there is the organizational structure sometimes referred to as an "Organizational Breakdown Structure" or OBS. This structure is sometimes the traditional hierarchical structure of an organization with supervisors reporting to department heads who report to a more centralized authority. At other times it is a more autonomous resource manager structure where someone is responsible for the training and availability of a certain category of resource.
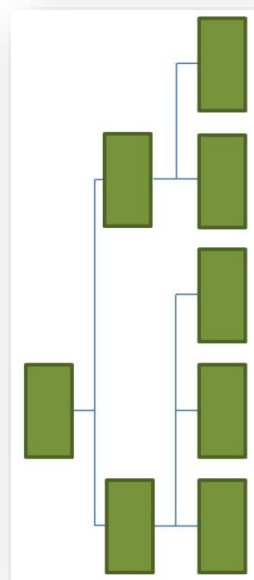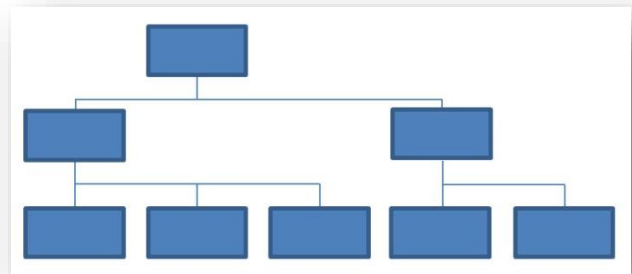
On a second axis is work organized by projects and tasks sometimes referred to as a "Work Breakdown Structure" or WBS. This can be imagined as the summary level being all work the organization does, the second level being, perhaps a project or product line and another level being tasks or activities within those projects or product lines. The larger the organization or the projects, the more levels of work that can be defined. These projects or product lines are managed by project managers or account managers who are responsible for delivering the work.

A matrix organization blends these two structures together. A matrix organization establishes structural tension between the goals of each axis. The resource managers in the organizational structure are responsible for the personnel. If there was no pressure to produce work, the organization would end up with happy, well-trained staff.

The project or product managers in the work breakdown structure are responsible for delivering the work or the projects. If there was no limit to how they used resources, the work would get accomplished at the cost of unhappy, burnt out overworked staff.

If we think of both aspects to the modern organization when it comes to timesheets, the challenge of selecting a single timesheet becomes quickly apparent. Those in the organizational hierarchy including team leaders, staff supervisors and department managers have a clear responsibility for how much their staff are working and whether or not they are in attendance. That begs for an approval system that supports the organizational aspect of the organization. The account managers, product and project managers have a vested interest in how much time of the different resources were spent on specific tasks and what progress was made on them. That begs for an approval system that supports the work aspect of the organization. When we look at selecting a timesheet we often end up with this conflict of responsibilities and this is most evident when we consider the approval functionality of the timesheet.

Let's consider several different approaches that organizations consider when looking for timesheet approval functionality.

Line Item Approvals

Some organizations expect that once the timesheet is submitted, it should first be burst apart to the component lines and each line should go separately for project approvals. In this model, each project or product manager would see the line items appropriate to them. They would all approve these lines and only once all project managers had agreed would the timesheet with all project lines approved would be sent to the organization so Finance, Human Resources, Payroll or others could use it for their purposes. We call this type of approval "Line Item Approvals"

The concept sounds promising but only works when 100% of project managers approve the data. The challenge comes when any part of the data is not approved.

Let's assume a timesheet of an employee who worked a total of 40 hours over three different projects this week. Project Manager #1
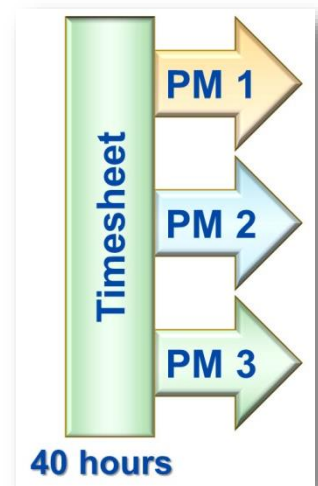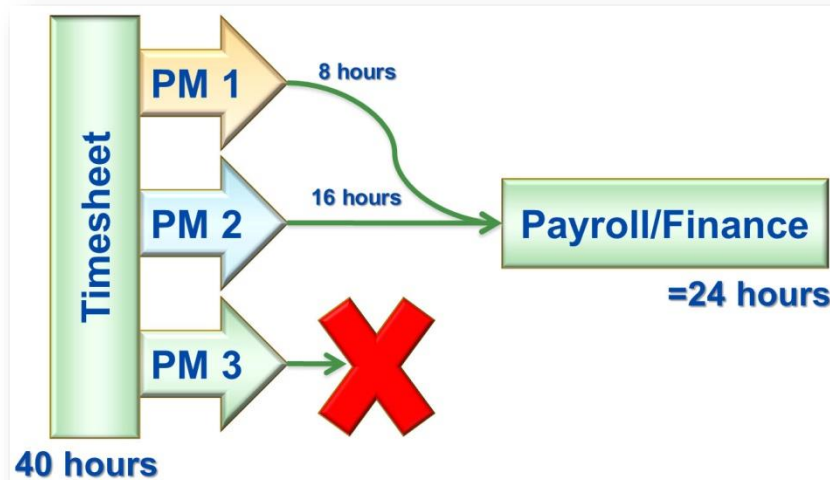
has 8 hours of this timesheet to approve. Project Manager #2 has 16 hours to approve and project manager #3 also has 16 hours to approve. Project Managers #1 and #2 think the timesheet looks fine. Project Manager #3 rejects the 16 hours as completely unacceptable. Now what happens when we gather this data to send to payroll?

Payroll will only see the 24hours of time on this timesheet that successfully made it out of the Line Item Approval process. This is clearly unacceptable.

Sequential Approvals

Some organizations believe that Line Item Approvals could be solved by making approvals work in a sequential routing. The Sequential Approval concept is very much like the routing slip for a document. The timesheet would go like a piece of paper from one person to another and then another until everyone who was implicated on the timesheet had had a chance to approve it.

Let's take our same example of a timesheet with 40 hours on it which will start by going to Project Manager #1 then #2 and finally #3 before then being routed to the Finance/Payroll departments.

Once again, the concept looks great on paper *so long as everyone approves the data in a timely fashion*. As soon as a project manager must reject the data, we end up with a big problem.
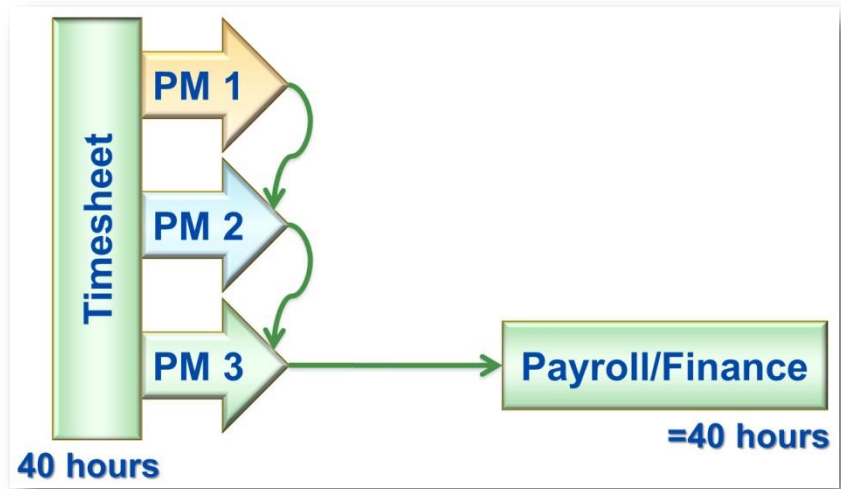
Let us say that Project Manager #1 finds the timesheet completely acceptable. Project Manager #2 sees perhaps an issue but not enough of one to reject the timesheet but Project Manager #3 sees a more significant problem. They reject the timesheet for correction. Once it's corrected of course, it must go back to Project Manager #1.

This time Project Manager #1 finds the timesheet fine again but Project Manager #2 has a problem with the changes and must reject the timesheet. We've seen organizations try to implement this where some timesheets are never able to successfully exit the system. These timesheets never make it to the Payroll/Finance department.
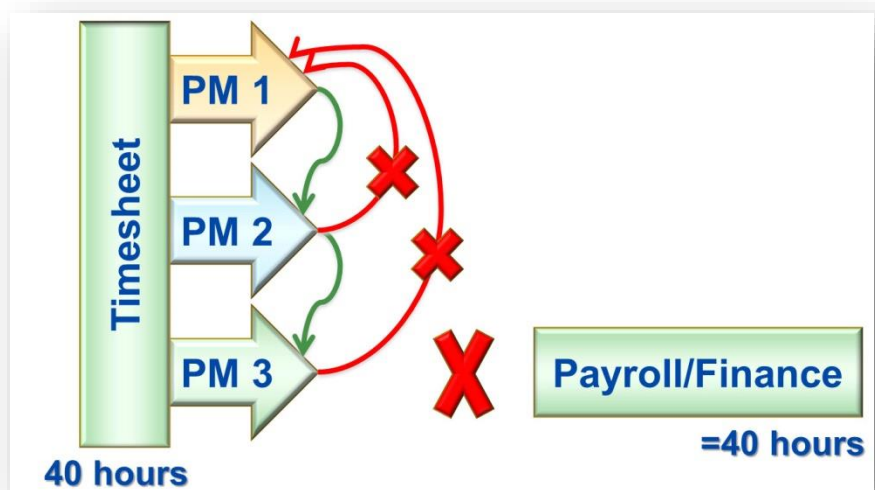
The Matrix Approvals Dilemma

This matrix dilemma makes choosing one timesheet for multiple purposes a real challenge. The problem is not that the data is inappropriate or that the group from one axis of the matrix doesn't care what the other group requires. The problem is one of perspective and of process. Without fully confronting the matrix challenge, organizations can make timesheet design or timesheet purchasing decisions that are ineffective and highly expensive in both time and lost effort.

The impact of not solving the approvals challenge

Many organizations do not solve this approvals challenge. This sometimes occurs because of conflicts in software systems that have already been purchased or because of conflicts in authority between one department and another. Organizations which cannot resolve this dilemma are left with the resulting costs some of which can be significant. Avoiding this challenge, doesn't take away the needs of the organization and consequently organizations make decisions of design and process to the best of their abilities to solve the individual timesheet requirements that are required. Some of the most common paths for an organization does not resolve the approvals challenge are:

Most common: Implement multiple timesheet systems

The most common response to dealing with disparate timesheet needs is to deploy multiple timekeeping systems. No one ever plans to do this. No one wakes up in the morning and thinks "I've got a great idea. I'm going to implement several timesheets and have our staff fill in more than one." This is typically not a single decision, it is *multiple* decisions taken by different managers; each using their authority to implement the timesheet that responds to their own requirements. Finance or Payroll implements a timesheet because they must pay the staff or they must bill for services. It is a critical business element.

Frustrated by a lack of project-level approvals or by a timesheet system which cannot return data at the task level to the project management system, Project Management implements a completely new timesheet system to create their own timesheet data. This results in at least two completely detached timesheet systems. Worse, the systems are almost guaranteed not to reconcile. This results in summary project timesheet data and finance timesheet data not matching.

Perhaps Human Resources now implements a third timesheet system to track vacation, personal time and sick leave banks of time.

In a worst case scenario, employees may need to fill out 2, 3 or even 4 timesheets on a given week.

Option 2: Don't implement a project timesheet system

Some organizations handle the dilemma by simply giving up. It's too complicated a problem to solve and for some organizations, if they don't have an explainable solution, they simply won't implement any. Payroll has other methods of taking care of paychecks, particularly if most employees are salaried. Project managers simply do without budget vs. actual reporting and variance reporting and update their projects without the actual effort per task being tracked. Human Resources tracks vacation with a big spreadsheet and a lot of manual intervention.

Option 3: Don't do activity-based-costing (It's too hard)

Another method of giving up is to have Finance abandon activity-based-costing as a process. Payroll continues with its own system but management of costs on projects is simply not done. It's perhaps not surprising to find a surprising number of project management environments which simply do not include cost management. When asked, project managers say they want

to do cost management but cannot get access to actual costs in a format or in a timely enough fashion to make the process work.

Option 4: Write a customized or manual timesheet system which either:

❖ **Bursts the timesheet into Line Item Approvals**
As we've described above, this solution looks elegant in its design but is extremely difficult to implement when the rejection of data is considered.

❖ **Route the timesheet into Sequential Approvals**
Just like Line Item Approvals, this method works well when no data is ever rejected but bogs down quickly as soon as there is a break in the approvals.

While it may sound attractive to write a customized timesheet application, the project is deceptively complex. Creating the prototype entry screen can be done in a day or two, but creating all the business logic, validation, data tracking, links to external systems and, most importantly, auditable process can take a couple of man-years. Many custom timesheet projects are abandoned in mid-development as the underlying complexity of the project becomes apparent.
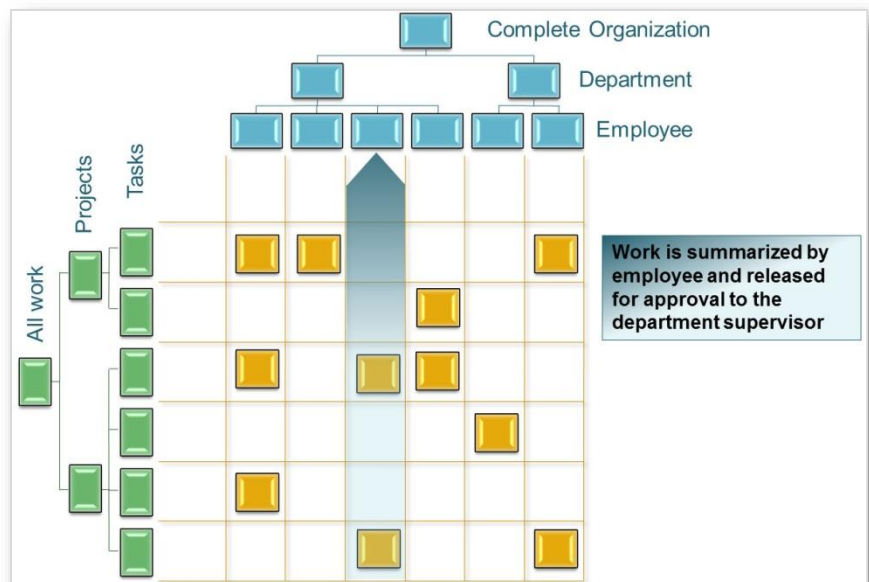
Using TimeControl to overcome the approvals challenge

HMS Software confronted the approvals challenge in the early 1980s while designing timesheet systems that would be used by both Finance and Project Management Offices. It quickly became apparent that the complexity of the timesheet would center on the approval process. Solving this challenge required designing a process that would function in a matrix management environment.

If we separate the approval process into its component elements, the organization of those elements becomes much clearer. Each employee always has a supervisor of some kind. Even if that supervisor also carries a project management responsibility from time to time, there is always someone responsible for an employee's time at work. Each employee may also have work whose time must be approved separately. Which of these, we must ask, must be done first?

Step 1 - Organizational Approvals

The first and easiest step in the process is to determine the total number of hours worked by the employee. If the timesheet is in a weeklong cycle then we must look at the total hours for that week. For salaried employees, this might mean meeting a weekly hourly total standard. For wage employees, it might mean adding the total hours based on the rules of the organization. We can gather other information that may be critical at the same time including any hours that were not worked but must be tracked such as holiday/vacation time, sick leave, personal time off, or other entitlement time which must be tracked by payroll, human resources or other organizational departments.

We can easily apply business validation rules right at the timesheet before it's even seen by the supervisor for manual approvals. Validation rules for total hours, vacation time, banked time and other criteria can be instantly tested and corrected by the employee themselves.

Then the timesheet can be sent to the supervisor and even hierarchically higher through the organization if required where it can be checked visually. The beauty of such a system is that different categories of users can

have different rules applied to them. Contractors might have one set of validation criteria, salaried staff another and wage/hourly staff, still another.

Step 2 – Project Approvals

Once this element of the data has been approved, these elements can be frozen or locked. This allows the timesheet data to be used immediately for purposes such as payroll and vacation tracking.

Now that the totals for the week are frozen, we can turn our attention to step two in the process and allow project managers to view the line items of the timesheet.

Unlike line item approvals where project managers can just delete a line item and thus change the total, we allow project managers not to delete lines but rather to redistribute the hours from one place to another. The functionality for this is well known in accounting circles as a

Once posted, time is summarized by project and project managers may redistribute the hours but not change the total which has already been approved

Debit/Credit transaction. The project manager can take hours from one task and put it on another but they cannot just remove the hours.
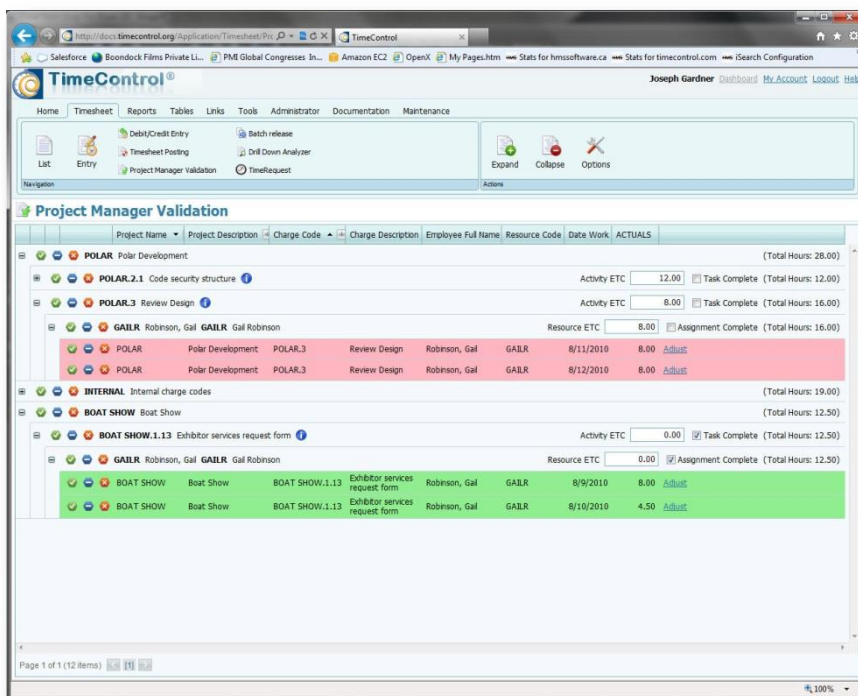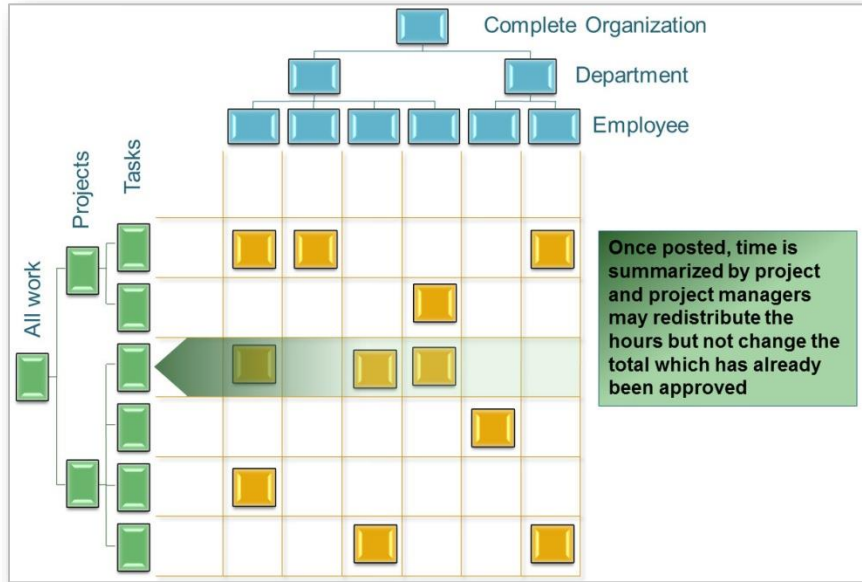
When this process is implemented, a limitless number of projects can flow through the system and, because the process is integrated yet each axis of the matrix is managed distinctly, the delay of a project manager or a particular problem with a line item's approval cannot stop the organizational approvals, the payroll or other financial management from proceeding.

One of the advantages of the Matrix Approval process is how each part of the

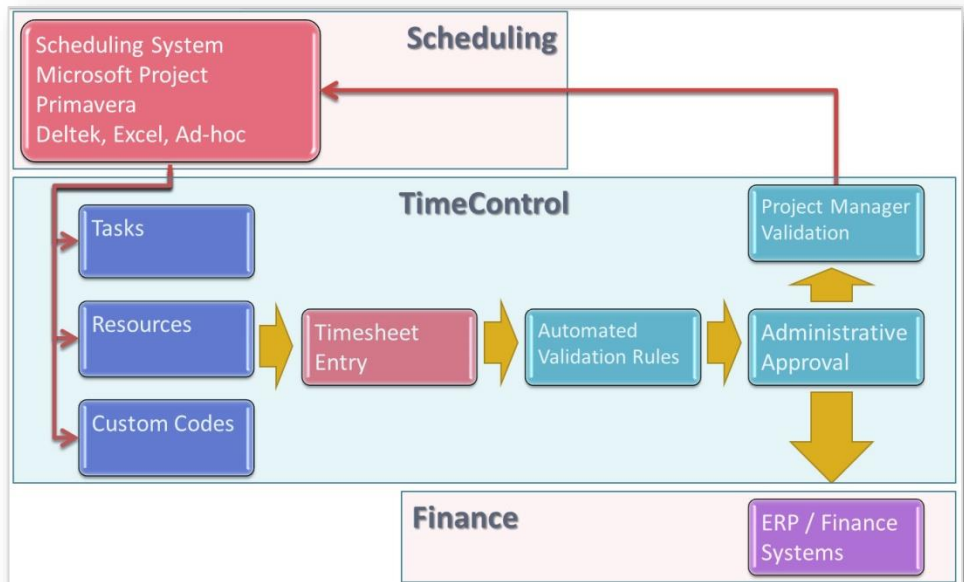organization can use the same data independently. This is possible because:
   a) The Finance, Payroll and HR departments have little interest in what was done with the time. They care more over how much time was spent and what its cost was.
   b) The Project Department has little interest in how much total time each employee spent working. They care more over what the time was spent on. A project manager will care only for what hours were spent on the project they are managing.

One of the advantages of this kind of environment is its forgiving nature. If a project manager isn't ready or doesn't enter his or her changes, they can simply be entered after the fact. The data will then self-correct in the next project management update period.

TimeControl's Matrix Approval Process Data Flow

When we put this concept into a flow of data, numerous external system can optionally be included.

We can start the process almost anywhere. If a project scheduling tool or even different project scheduling tools are being used, they can deliver to TimeControl the expected tasks including the resource assignments that were defined. If tasks are defined in other tools including the Human Resources system, Finance/ERP system or other ad-hoc tools they too can be polled for tasks that may be applicable to a timesheet. This might include not only the tasks and assignments but also linked codes, work center identification, meta data or expenditure types. TimeControl could also manage or initiate tasks within the timesheet itself and not link to any external source for new tasks.   All of this results in a list of possible charge codes to be selected by the end user who will spend only a few minutes a week entering their time into their timesheet.

Once the timesheet is released for approval, the automated Validation Rules are tested and if the timesheet passes those it then goes to Administration approval through as many levels as is required. However, with the power of the Validation Rules already in place, most clients will need only one level and some will need none at all. After all, in the past with manual systems, all kinds of elements of the timesheet had to be verified but if the Validation Rules can ensure that all the appropriate business rules for that timesheet have been followed then the supervisor may have little or nothing anymore to verify.

The data is then 'Posted' and the totals frozen before Project Management makes any adjustments it requires with TimeControl's unique Debit/Credit functionality. A complete audit of changes down to the line item is always maintained in order to comply with numerous generally accepted accounting principles and with auditing standards should they be required.

Data can sent to external HR, ERP/Finance, Billing and Project systems as well as used in corporate mash-up reports or dynamically updated dashboards.

In a fast-moving and challenging economy, organizations in both the private and public sector are being called upon to be as effective as possible with their resources. Timesheet management forms a cornerstone of good governance of human resources. It is no longer enough to know just how much time was spent by an organization's staff or how much money that staff costs. It is critical to know what that time was spent on and allow management to ensure that time is being spent on the work, projects or products that will deliver the most value to the organization and its constituents.

Matrix Organizations must resolve the Matrix Dilemma if they wish to collect timesheet data effectively, accurately and in a cost effective manner. Failing to resolve this challenge leaves the organization with either a lack of essential data tracking or excessive effort in collecting the same type of data with duplicate entry in redundant systems.

> "From the beginning, TimeControl was a smashing success. It's easy to use and accurate. Our pilot group learned easily and we were quickly in a position to roll out."
>
> Genie Sarne
> Project Controls
> ElectroMotive
> Lagrange, IL

A timesheet system such as TimeControl can resolve this challenge. It is inexpensive, flexible, fast to deploy and easy to integrate within the existing infrastructure.

For more information on how TimeControl can help you solve the Timesheet Approvals Challenge, contact HMS at info@hmssoftware.ca or go to www.timecontrol.com.

Appendix A: The TimeControl multi-purpose timesheet

In today's challenging economy, tracking productivity is more important than ever. It is no longer enough to know only how much time has been spent. Now management demands that you know what was done with the time. Many organizations are turning to project and task based management as a way of being more effective. One of the most difficult aspects of implementing project control is the capture and approval of labor actuals. *TimeControl* provides an electronic timesheet system designed to serve both Finance and Project Management
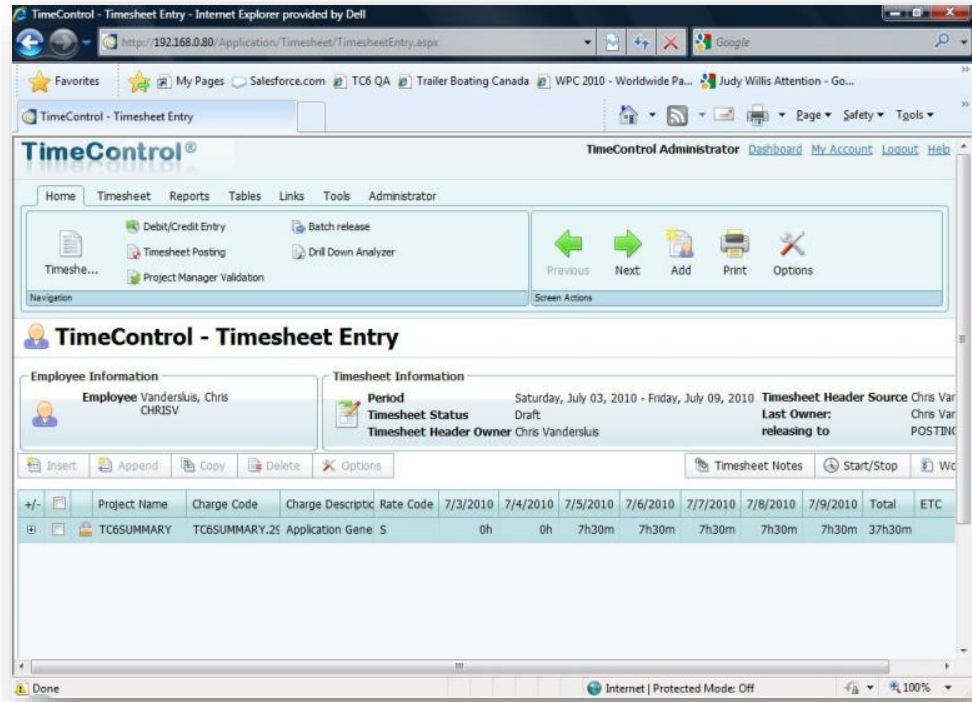
Install On-premises or subscribe in the Cloud Online

TimeControl is avialable both as a purchasable license to be installed on your premises or in a subscription model with our Timesheet as a Service TimeControlOnline. You can find out more about our online subscription at www.timecontrol.net.

Open Architecture

TimeControl is an open architecture system which supports a variety of databases including Microsoft SQL Server, Oracle, Sybase and MySQL. Customizable user profiles allow the *TimeControl* interface to be tailored to each user's requirements.

Multi-lingual

We know that not every user speaks English as their first language. TimeControl comes with a number of languages already in the system but every label and every message is open to the TimeControl Manage Languages module so you can change the existing translations or even add your own. This is a great feature for adjusting terminology in the system to match your organization's (The only word you can't change is: "TimeControl").

Easy to use web interface

TimeControl's interface is browser-based and user-intuitive. User Profiles determines what the user will be presented with and the user can define where TimeControl should start and what defaults they wish. End users can use a variety of browsers such as Internet Explorer, Firefox, Chrome, Safari, or Mozilla.

Free TimeControl Mobile App

TimeControl includes a free Mobile App available from the Apple App Store for iOS devices and Google Play for Android devices. Enter timesheet hours and expenses you can even manage approvals.

Timesheet Approvals

TimeControl supports HMS Software's unique Matrix Approval Process for Labor Actuals which allows for quick authorization of project data. This process resolves the inherent conflict that is found when both the financial and project management hierarchies must approve timesheet data simultaneously. Automated validation of timesheet data is handled by TimeControl's remarkable Validation Rules . Additional approvals can be done manually with a simple Approve/Reject or Approve/Update process. The Project Manager Validation screen displays an easy-to-view hierarchical interface for managing project approvals.
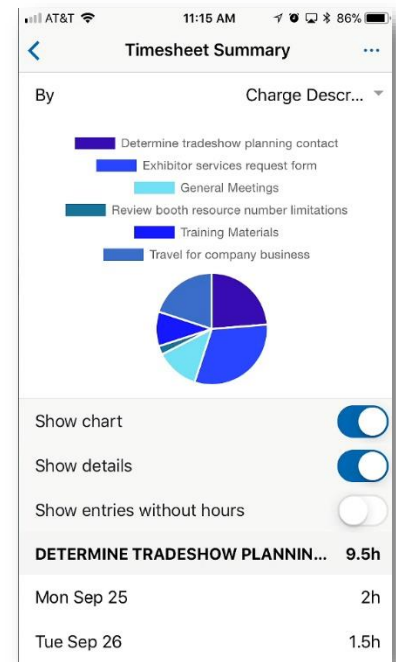
Total Flexibility with User Profiles

TimeControl's User Profiles allows the Administrator to determine which menu choices, reports and fields are accessible by each user. The entire interface can be tailored to the user's individual needs. No other system on the market today offers this much flexibility.

Field level security ensures that only the information which is important to each user, is displayed. Fields can be made read-only or invisible, removing them from view entirely. This makes *TimeControl* at once a secure, deployable system and an easy-to-use one as well.

Links to Project Management Systems

TimeControl includes direct links to project management systems including Oracle-Primavera Pro and EPPM, Microsoft Project, Project Server and Project Online, Deltek's Open Plan and Cobra, InEight's Hard Dollar, BrightWork and SharePoint. In fact, multiple products and versions can be supported simultaneously.

Integrating with a project management system drastically reduces timesheet errors as only valid tasks will be available in which to charge time. Hours entered in *TimeControl* are returned directly to the project management system as activity and resource progress.

TimeControl also supports customizable export formats for integration with virtually any financial or HR system.

Vacation Approvals with TimeRequest™

The TimeRequest module allows users to make a request for certain types of times to be approved for entry in future timesheets. The most common application of this module may be for requesting Vacation time off. Once approved, the time is then automatically entered by *TimeControl* into the appropriate future timesheet.

The TimeRequest module is, however, not restricted to just Vacation requests. Any category of time can be exposed to the module. This allows an infinite number of applications such as for travel time, training time, offsite or onsite time or any other type of time category where the organization wishes it to be approved in advance.

E-mail Enabled

TimeControl allows email notifications to be sent for various events such as missing timesheets, incomplete or non-approved timesheets as well as timesheets that were rejected or re-released for approval.

Expense Reports

TimeControl includes extensive expense report functionality. Users can enter an unlimited number of expense report items for each timesheet line.

Links to Payroll, HR and ERP/Finance

TimeControl is designed with a Links module that lets you define links to corporate systems and software including Payroll software or online services, Human Resources systems and ERP/Finance systems.

Using TimeControl to fulfill the requirements of not only project management but also Finance, HR and Payroll means you can eliminate the costs and ineffiency of mlutiple timesheets.

Reporting

TimeControl's reporting engine looks just like Excel™. Reports can even be saved in Excel or HTML format.

TimeControl's Reporting Wizards make report generation easy. *TimeControl's* field-level security is always active so only the fields which a user has permission for will be shown.

Predefined reports are available in a variety of formats which include posted timesheet data, table lists, printouts of the timesheets themselves and missing timesheet reports.

For more information

For a more complete description of TimeControl and its features, visit www.timecontrol.com. To try the timesheet system for free, visit freetrial.timecontrol.com.

Appendix B: HMS Software Client List

Amongst our many clients we're proud to include the following:

Engineering/Construction
Aecon Construction
AeroInfo
Koch Business Solutions
Kongsberg Devotek
Thompson Beta

Gas / Utilities
Gulf South Pipeline
Acergy
Petrocon
VenCorp
Foster Wheeler

Manufacturing
Alcan
Parker Hannifin
Georgia Pacific
Ultra Electronics
Tennant
Wagner Spray Tech
Vision Systems
Electro Motive
GE Sensing
Tommy Hilfiger

Defense / Aerospace
Bombardier Inc.
CAE Electronics
Lockheed Martin
Rolls Royce
SAAB
Army Corps of Engineers

Government
Amsterdam Port Authorities
Atlanta Airport
Dutch Railway
Government of Saskatchewan
Railway Procurement Agency (UK)
Ville de Montreal
City of Winnipeg

Technology
Arivia
CSI Piemonte
EDS
Face Technology
Fuel Plus Software
GE Access
Microsoft
Positron
Psion Teklogix
Inventure
Fujitsu

Telecommunications
Cable & Wireless Bartel
Ericsson
EXFO
Motorola
Philips Semiconductors
SARA Amsterdam
Stratos Global

Financial
Standard Life
Development Bank of Canada
Alliance One
Centre de Recherche Informatique de Montréal

Health/Pharmaceutical
Boehringer Ingelheim
National Health Service (UK)
Azko Nobel (Organon)
RTS Thurnall
Canadian Institute for Health Info
Iogen
Registrat

Education
Johnson and Wales University
Eastern Michigan University
Queens University
McGill University

Appendix C: About HMS Software

HMS Software, a division of Montreal, Canada-based Heuristic Management Systems Inc., is a leading provider of enterprise timesheet and project management systems.

Founded in 1984, HMS Software's expertise in implementing enterprise project-management and enterprise timesheet systems is recognized worldwide by some of the world's best known organizations. HMS's signature product, TimeControl, an enterprise timekeeping system designed to serve the needs of both Finance and Project Management, is distributed worldwide through an extensive list of distributors and dealers located on every continent with representatives in the US, the UK, Australia, Mexico, Europe, Asia, South Africa and the Middle East.

HMS Software's client list includes some of the world's leading corporations in the telecommunications, IT, finance, engineering, defense/aerospace and government sectors including such organizations as Acergy, Aecon Construction, Alcan, the Atlanta Airport, Akzo Nobel, The Canadian Business Development Bank, The City of Montreal, EDS, Ericsson, General Motors, the Government of Saskatchewan, John Deere, Kelly Services, The UK's National Health Service, Standard Life, UPS, Volvo Novabus and hundreds of others. HMS maintains offices in Montreal, Quebec and Toronto, Ontario.
For more information about HMS, please visit www.hms.ca.

TimeControl

First published by HMS in 1994, TimeControl has been adopted hundreds of clients and over 150,000 users around the world. TimeControl is designed to serve the needs of both project and finance simultaneously. It allows an organization to use a single timesheet for project tracking, time and attendance, time and billing, HR tracking, R&D Tax Credits, DCAA and project costing instead of having to deploy many timesheets to serve these needs. TimeControl is available for purchase for an on-premises implementation or as a subscription as service. TimeControl's architecture is flexible and extensive supporting numerous databases such as Oracle, Microsoft SQL Server and MySQL, multiple browsers such as Internet Explorer, Firefox, Safari and Chrome and even includes a mobile interface for Smartphones
For more information about TimeControl please visit: www.timecontrol.com.