Level 5. Revenue Integration. Tools like Salesforce.com or SugarCRM (or similar sales force automation technologies that record closed sales) provide a great way to track bookings (depending on your business, even revenue). Integrating your time accounting system into these systems can give you a profit report (or an approximation of one). Integrating the system into QuickBooks, SAP or other accounting systems can connect time periods for revenue recognition to cost, giving a good estimation of profit on a per-person-per-project basis. For R&D departments or IT organizations or other knowledge worker organizations internal to a company, proxies for revenue like business value delivered can be used.

You've now reached time tracking Nirvana - per-person-per-project profitability measurement. And at every step, your situation is better than it was before.

Functions of Time Tracking Data



The Future of Project Accounting, Probably

What will the future of project accounting look like?

The Achilles' heel of project accounting is data collection -- mainly time tracking. The Achilles' heel of time tracking is compliance and adoption. Journyx has built-in email reminders and adoption dashboards to alleviate that problem somewhat. Further, we're working on speech input, PDAs, and integrations with popular tools – like call-center software and cash registers – in specific industries to gather time records automatically. We've also launched on-demand web sites so you don't have to install anything more than a web-browser (or convince your cranky IT people to help you).

This last development is particularly intriguing. The software industry has begun a shift from customers installing software at their physical locations to renting web-based software over the internet on a monthly basis. It's moving this way because customers want it to, and so do the most of the reputable vendors.

Most software companies get their revenue from "shelfware" (software that is rarely used and ends up on the proverbial shelf). Popular programs - from Ouicken to SAP - for which customers pay the total cost up front - can be complicated, making them difficult to use and achieve maximum benefit from. However, once a customer has paid for these programs, there is little incentive for the company to follow up and ensure that it is working properly for the customer.

But things may be improving. Companies like Journyx, KaleidaCare (foster care automation) and Affiniscape (association management) are quite successful in renting software over the web to their customers. If customers sign up for a monthly service from one of these companies and the solution doesn't work, customers will likely stop using the software after a month. This gives these software providers incentive to pay attention to customer usage, understand whether or not the technology is providing business value, and strive to increase its value. With this model, everybody wins because interests are more aligned.

And that's a future everyone will profit from.

About the presenter

Curt Finch is the founder and CEO of Journyx, Inc. He has 17 years of software development and distributed workforce management experience. In 1997, Curt created the world's first Internet-based timesheet application and the foundation for Journyx. Curt has managed development teams creating enterprise-level software solutions since 1985. As a member of the executive team, Curt helped launch TKG, a venturebacked firm that grew to 50 employees and \$7.5 million in sales that was sold to Veritas for \$40M. Curt has a B.S. in Computer Science from Virginia Tech.

© 2006 Journyx, Inc. For reprints of this piece, please email reprints@journyx.com Functions of Time Tracking Data

Time for Projects Project Estimation

Using time and expense data from similar past projects to predict future project costs and schedules.

Project Tracking Knowing how close to "done" a project or subproject is.

Project Accounting Understanding the cost to date of a project.

Time for Billing

Internal Billin Creating split bills to departments within your company that are using your services.

External Billing Billing clients, sometimes exorbitantly.

Billing Verification Proving that contractors and outsource personnel have sent you accurate bills.

Time for Payroll Salaried Payroll Leave tracking.

Hourly Payroll Overtime calculations, punch rounding, lockouts.

A project accounting history of the world

30,000 B.C. - Homo sapiens killed off the Neanderthals and became the only remaining human-like species on the planet. Humanity subsisted as

hunter gatherers.

10.000 B.C. – One million humans covered the earth (except for a few places like Hawaii). Farming is invented but most people remain hunter/ gatherers.

1500 A.D. - 100 million humans. The development of movable type and doubleentry bookkeeping enables knowledge workers. By now most people are farmers - the European variety of which travels to the New World and attempts to wipe out American hunter/gatherers.

1800 - 1 billion humans. The American system of manufacturing - semi-skilled labor using machine tools and templates to make standardized, interchangeable parts - is developed. Most people are still farming.

1930 - 2 billion humans. The computer is invented in 1938. People fly planes and use submarines. Many in the developed world work in manufacturing.

1960 - 3 billion humans. Knowledge workers finally become commonplace. Still, most people in the developed world work in manufacturing.

1970 - 4 billion humans.

1990 - 5 billion humans. The internet arrives. Knowledge workers discover dancing hamsters

2000 - 6 billion humans.Most people in the developed world are now knowledge workers. Flash games and YouTube discovered.

2012 - 7 billion humans.

2028 – 8 billion humans. Foods and goods are created automatically.

Why Project Accounting?

The era of manufacturing and farming is giving way to one of knowledge work. This is old news in the U.S. but, in our lifetime, the changes the developed world is currently undergoing will be experienced by the vast majority of humanity. Eventually, nearly everyone will be some sort of knowledge worker.

Companies like Wal-Mart, Dell, and Archer Daniels Midland exemplify how well the problem of materials management is already solved. Knowledge, process and project management, however, are still relatively nascent fields.

Out of our 30-millennia history, only in the last 50 years have we seen the cost of knowledge workers rise to be a significant portion of the economy. In Texas alone in 2003, 48% of the workforce fell into the knowledge worker category. These numbers are growing and will, in our lifetime, encompass the majority of workers globally. Think about what your parents and grandparents did for a living. Chances are they were farmers or factory workers for at least a portion of their careers, not knowledge workers.

So why all this interest in project and portfolio management, time tracking and project accounting solutions? Our hunter/gatherer ancestors implicitly knew the costs of doing business. Materialsoriented businesses, like manufacturing and farming, have had adequate accounting systems for thousands of years.

The knowledge worker-dependent businesses of today, though, are relatively new and for the first time since accounting was invented by Babylonian farmers thousands of years ago, nobody knows their costs. If you don't know your costs, you don't know where you're profitable. And if you don't know where you're profitable, you can't steer your company to success.

2002



In the knowledge economy, understanding production costs requires a new approach.

Accounting for Knowledge Workers in the New Millennium

Knowledge worker – One who works primarily with information or one who develops and uses knowledge in the workplace. The term was coined in 1959 by Peter Drucker.

PPM – Project and portfolio management. PPM is a corporate function that involves managing the risks, costs and progress of multiple projects at once.

Project Accounting is how we understand production costs in a knowledge economy.



Demand for project and portfolio management solutions, which often incorporate some project accounting abilities, is growing at 11% annually.

What Workers Know About Costs

Hunter/gatherers knew costs implicitly.

Farmers invented simple accounting and writing systems to track trades and debt, and understood cost accounting.

Manufacturers require materials cost accounting.

Most knowledge worker organizations do not know costs on a per-project basis at all.

What is Project Accounting?

Project accounting is the practice of creating financial reports specifically designed to track the financial progress of projects, which can then be used by managers to aid project management

Impediments to Success

The biggest impediment to success in project accounting is employee resistance to data collection. But why do people hate to track their time so much?

Reason #1 Reporting time can threaten status.

For salaried people, especially if they have been employed earlier in their life in an hourly "time clock" environment, reporting time can make them feel demoted. Conventional wisdom (with which this author disagrees) is that "professionals" are more trustworthy and less in need of supervision than "blue collar" people.

Reason #2 "What if I find out that I don't work as much as I like to think?"

Some people - often the most productive - garner self-esteem from the large number of hours they work. But sometimes they're not sure if they believe their own braggadocio and the thought of finding out the truth is scary.

Reason #3 Time is a bad metric for effort or productivity.

Knowledge workers know that managers, who have the power to reward some people over others, often forget the vague and aggregated metrics of real productivity in favor of some simple numbers that are tangible, like time records. Managers may take the easy path of rewarding based on time spent rather than develop more subtle and appropriate metrics of real productivity (hint: don't do this).

Reason #4 "I'm too busy."

The busiest, most responsible employees - the productive ones whose time is in highest demand - will, sooner or later, always have to stop doing the primary mission of the company to fill out a timesheet. The star employees tend to procrastinate when it comes to this task, or even outright refuse to do it. Worse still, they may unintentionally create flawed records. Meanwhile, the malingerers and marginal producers will often create perfect time records and never submit them late. This creates an impression in the minds of both that the whole exercise is worthless.

Remedies for Impediments

Education and Buy-In

The most effective way to get people to do anything is to make sure they understand what's in it for them. In the case of payroll for hourly workers, since they want to get paid, it's easy. In the case of billing automation, it's revenue for the company. Most people can understand this because most people care if their company succeeds.

Project accounting is more abstract. Bad project accounting leads to unnecessary overtime, stress, blown schedules, bad estimates and cancelled projects. Citing specific examples from your company's history where accurate time collection could have made things easier for your employees helps to get them on board.

Adoption Dashboard

Journyx Timesheet includes graphs that make clear to managers which departments and people are entering their time consistently and completely and which are not. This information helps managers understand early who they need to push on (to the degree a top-down approach works in the company's culture).

Incentives

Tying bonuses or other benefits to complete data collection is often used in customer relationship management (CRM) tools to adjust sales commissions. The same can be done for other forms of data collection. Journyx has a patent – we call it the 'frequent flyer patent' – for rewarding employees (on your behalf) for logging time and expense data in a timely manner.

Phased rollout

Adopting a multiphase rollout approach that leads to per-person per-project profitability allows you to affect the culture in more manageable steps.

Email Reminders

Getting an automated reminder when your time has not yet been recorded produces results... usually.

Implementing Project Accounting

If you have more than about five people in your organization and they are working on multiple projects or within many processes, it is time to start thinking about implementing time tracking. If you have 100 people in an R&D group and you're not tracking time, then you're wasting the lives and work of a significant percentage of your employees. Odds are you have them working on projects that the market isn't interested in, or that are over-budget or otherwise in the ditch -- and you don't even know it.

In his book "The Seven Habits of Highly Effective People," Stephen Covey argues that you should track your time even if it's just for yourself. If you do you will certainly be surprised by the data; however, we have found that the business value is really delivered in terms of understanding profitability for organizations of at least five people. This is part of why Journyx makes Timesheet available for free for the first 10 users.

If you've decided that it makes sense for your company to get started with time tracking, follow this five-step process to reach time-tracking Nirvana. Guiding your company forward to a tracking environment requires changes to your corporate culture. Start by explaining the benefits of doing this to the company. If you understand your costs, you can run your business. Otherwise, you're flying blind.

Level 1 - Chaos Most knowledge worker companies today are at this stage. If they're a business services company, their client billing is inaccurate. If they're an IT division of a large firm, they do not know which projects are enhancing the value of the company and which are destroying it - therefore they cannot run their division like a business.

What to do to improve - Create a complete authoritative master list of the projects or processes whose costs you want to understand, along with a list of the employees that spend their time on that work. Begin with the end in mind. What will the reports that you want to get out of the system ultimately need to look like? Decide who will own the system and begin populating the system by adding new employees and projects to it. **Get most of your people to start tracking time**.

Level 2. Most of your people are tracking most of their time. Benefits - Now you have a basic idea of how your resources are spending their efforts and it will produce some surprises. Now that you've entered data in the system and employees are tracking their time, you have an accurate and complete list of your company's projects. Say, for example, you review the data and see that some projects have more time spent on them than you expected. Or you may find that 'fun' projects and maintenance activities are getting more attention from more people than you realized. Real data has already surprised you.

What to do to improve - Start measuring adoption by seeing how many employees you can get to track their hours and how often they enter it. Your data will be best if people track their time daily or even more frequently. Recording what you did a week ago is useless. Who remembers what they ate for lunch last Thursday? Next - **Get everyone tracking time and expenses with pay rates.** Now it's time to guide your company to the next level. Compute a pay rate for each person in the company and enter it in the system. Ask employees, where appropriate, to record mileage and travel expense data. Further encourage your entire employee base to track their data.

Level 3. Direct costs are known. You now know your per-project-per-person direct cost data. Your estimation ability has improved dramatically through the ability to conduct data-based post mortems of projects. From a cost perspective, you can begin to run your organization like a real business to a real extent.

What to do to improve - Provide for calculations of indirect costs and choose formulas for spreading that cost. Expenses incurred in your company in areas like accounting, marketing, office space, and other general and administrative expenses can be organized by project cost, project revenue, per person, by square footage of office space used, or one of countless other ways. Often, two levels of indirect cost may be necessary. For example, if you are a business services company and have a customer for whom you are doing multiple projects, then you may have some partially indirect expenses that apply to that customer, but not for any specific one of his projects. There should be a formula for spreading that 'partially indirect' cost over more than just that one customer's projects.

Level 4. Now you know total cost on a per-project basis as well as total cost on a per-person-perproject basis. Benefits – Knowing the exact costs including the indirect costs of management and such things on every project and person allows you to understand which projects need help, which people are misallocated, and it shines a strong light on overhead costs. You have much of the data you need to improve your company's future.

What to do to improve – It's time to connect costs to revenue and then get profit.

(Continued)

P5 - Per Person, Per Project Profitability

Level 1 — No tracking/Chaos Over committed, processes abandoned in crisis, can't repeat past successes.

Level 2 — Minimal tracking Track project labor hours on all projects – approximate direct costs/schedules visible to management.

Level 3 — Full direct tracking Track time/rates and expenses on all projects - complete direct costs are known.

Level 4 — **Indirect allocation** Allocate indirect and semi-indirect costs over direct costs.

Level 5 — P5 – per-person, perproject profitability

Integrated with CRM or accounting, gaining revenue/ benefit data, giving per-person, per-project profitability. AKA Project tracking Nirvana.