Increasing Profitability with Project Cost Data

BY CURT FINCH

A structured approach to collecting good information helps you make better-informed decisions.

INDUSTRIES LIKE MANUFACTURING and farming have had effective accounting systems for thousands of years, but accounting for modern engineering projects can be tricky. Unfortunately, a poor grasp of project costs and return on investment (ROI) can be dangerous to an engineering firm's overall profitability and competitive edge. The only way to avoid this problem is to ensure you have the right project accounting methods in place.

Why Project Accounting?

Years ago, I learned the significance of project accounting firsthand. I was working at a consultancy called The Kernel Group (TKG), primarily fixing software bugs for IBM. Initially, we had a contract to fix the bugs for $2,000 each, regardless of the level of difficulty. Eventually, however, someone in our company decided we should apply the fixed-cost concept to our work. He believed that tracking the time we took to fix each bug would reveal the per-bug profitability, allowing us to set a fair price and gain competitive advantage. As it turns out, he was right.

As we tracked our time, we began to learn which bugs were most profitable, making the most money for the company. Not only that, but we extended this concept to product development, tracking time against each new debugging tool we developed. The data showed us which tools were successful and which were not, based on how much money and time were spent on developing them and how that affected the ROI. In one instance, this process alone resulted in $1 million of revenue for TKG.

When IBM began to bid out the work to multiple vendors, our project time data gave us an advantage over our competitors. We knew exactly how much to bid on each bug because we knew our costs so well. We also knew which ones were extremely difficult to fix, and we were able to bid those high because we had a technical monopoly on them.

Accounting for Engineering Projects

Tracking time for project accounting purposes also brings these benefits to engineering firms. Novar, one of the largest global energy management firms in the world, is a great example. The company began tracking project costs in greater detail in 2002. The project accounting data it collects not only enables staff to execute projects on time and on budget, but also helps them in planning and estimating future engineering projects. "It has saved us more than $10,000 in capital expenditures," says Trevor Porter, Novar's engineering manager.

The best way for engineering firms to begin implementing project accounting processes is simply to jump right in. Guiding your firm to a tracking environment requires changes to your corporate culture. Start by explaining the benefits to the company of doing this. If you understand your costs, you can run your business. Otherwise, you're flying blind.

Step 1. Prepare. Get a complete list of the projects or processes whose costs you want to understand, along with a list of the employees who 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. Begin populating the system by adding new employees and projects to it.

Step 2. Get (at least) most of your people to start tracking time. 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?

Step 3. Get everyone tracking time and expenses with pay rates. Now that you've entered data in the system and employees are tracking their time, you have an accurate and complete list of your firm's projects. Say, for example, you review the data and see that some projects required more time than you expected. Real data has already surprised you. 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 enforce adoption across your entire employee base. At the end of this step, you will receive per-project, per-person direct cost data.

Curt Finch is the CEO of Journyx (http://pr.journyx.com), an Austin, Texas-based provider of Web-based software for tracking time and managing resources. An avid speaker and author, Finch recently published "All Your Money Won't Another Minute Buy: Valuing Time as a Business Resource." He also authors a project management blog at www.project-management-blog.com.

Step 4. Provide for calculation of indirect costs and choose formulas for spreading that cost. Expenses incurred in your company in areas like accounting, marketing and office space can be organized by project cost, project revenue, per person, by square footage of office space used, or in countless other ways. Often, two levels of indirect cost may be necessary. There should be a formula for spreading "partially indirect" cost over multiple customer projects.

Step 5. Revenue Integration. Tools like Salesforce.com or SugarCRM provide a great way to track bookings (and depending on your business, even revenue). Integrating your time accounting system into these systems can give you a profit report, or at least an approximation of one. Integrating the system into QuickBooks 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 knowledge worker organizations internal to a company, proxies for revenue—like business value delivered—can be used.

Now you are successfully measuring per-person, per-project profitability. At every step, your situation is better than it was before. Once all of the above steps are complete, you'll know which employees are making money for the firm and which aren't, which engineering projects are profitable and which aren't, and which customers are profitable and which aren't. This is powerful information that can affect your strategy going forward, your rewards and compensation systems, and many other aspects of your business, just as it did for TKG.

Conclusion

In his book *The Seven Habits of Highly Effective People* Stephen Covey argues persuasively 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, the business value really starts to get delivered in terms of understanding profitability for organizations of five people or more. Engineering firms that track project costs and ROI will always take the lead, leaving other firms in the dust. Perhaps it's time to evaluate your firm's project accounting methods and how they are working for you.

MSC