



## TenStep Supplemental Paper

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### **Create Specific Metrics to Show the Value of your Project Management Methodology**

There are a number of factors that make it difficult to quantify the value of a methodology to an organization.

#### **You can't precisely compare projects before and after**

First, one of the characteristics of projects is that they are all unique. Therefore, you cannot make a direct apples-to-apples comparison of what projects looked like before the use of project management processes and after the fact. What you would like to say is that it took us X hours to do a project before, and now it takes Y. However, two projects are never exactly the same to make this comparison. You may be able to make some general statements by comparing projects with similar characteristics. However, another related problem is that most companies don't keep any historical records of project characteristics and costs to use in this type of comparison.

#### **There is a lot of other stuff going on**

Second, the rollout of project management processes in a large company requires a fair amount of time to be successful. In fact, it may take a few years in a large company before everyone is trained and using the new methodology. Of course, no organization can stand still while a long culture-change initiative is going on. The problem, then, is that it is hard to tell how much impact the project management initiative has on the organization versus the other factors that are coming into play at the same time. Over a couple years, you find that new tools are being introduced, human resource changes are occurring, reorganizations happen and other culture change initiatives are vying for focus. If it appears that projects are being managed more successfully, it is hard to isolate what factors are coming into play to drive that outcome.

#### **You do not have a basic and consistent unit of work**

Third, the fact that projects are unique would not be a problem if we could factor them down into some basic units of work. In other words, if we could say that one project without project management required 25 units of work, and a second project with project management required 40 units of work, we could easily determine the effort and cost per one unit of work and then compare these numbers. Of course, there is a way to create this unit of work by initiating function point counting in your organization. However, most companies do not count function points, and don't plan to. Therefore, determining relative size and complexity of projects to any degree of confidence is problematic.

#### **Things may be a little worse before they get better**

Lastly, the introduction of structured processes in an organization that did not have them before might well result in some short-term incremental costs before the long-term value comes in. For instance, when the methodology is new, you may pay for customizing it for your organization. You also need to invest in training and perhaps some ongoing



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coaching. In addition, when a project team uses an unfamiliar process for the first time, there will probably be a learning curve. If the project is long enough, the long-term savings could outweigh the learning curve. However, if the project is short, the participants may tell you that it took longer than it would have if the methodology were not in place. This is not surprising. The overall value of the project management processes must be measured over time, since much of the value will kick in through the reuse of the common processes. As an example, the first time you use an unfamiliar Project Definition, it may take you longer to define and document the work. However, the second time you use the same Project Definition; you would expect that the familiarity would result in the project being defined much more quickly.

### **Very high level - estimated benefits based on industry analysts**

All that being said, there are some ways to show a sense for the value of project management processes. First, if you have nothing else, you can always take someone else's word for it. It has been reported from Gartner Group, for instance, that the average savings from using a project management process is 30%. A similar study from the Software Engineering Institute concluded that a project using good project management processes would save 35% over one that did not. Since these are prior research reports, you would need to take them at face value. So, if you can show that a project team utilized sound project management processes, you could state at a high level that there were savings. You can be conservative and say that using project management processes results in a 20% savings per project. In other words, a project that costs \$80,000 using good project management discipline would take \$100,000 if no project management techniques were used at all.

If you want something a little more customized to your situation, consider the following areas.

### **Lower level – consider value in three phases**

- **The first time through:** If this is the first time the project team has used the methodology, ask the project manager to estimate how much effort and budget was saved by using the project management processes. He or she may tell you that he or she saved a lot. He or she may tell you it costs more. He or she may tell you it took the same amount of time. This estimate should reflect the effort he or she feels was saved overall, which will factor into the one-time costs associated with the learning new processes and templates for the first time. As you are introducing project management, add up and average out these numbers to come up with an overall percentage. As an example, you may find that project managers are telling you that on average they saved 5% of the project budget by using good project management techniques on the first project. (If they are telling you, on average, that they are taking more time, then you should look again at your project management deployment. If it takes more time, then you are doing something wrong.)
- **Double the savings the second time through:** One of the major benefits of using formal project management processes is the reuse value associated with using



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processes and templates over and over again. This is where you start to see the savings. When a project manager uses the project management processes a second time, you should expect that he or she would see at least twice the average savings. As an example, if the consensus average savings using project management processes on the first project was 8%, then the second time through, you should be able to conclude the savings will be 16%. This takes into account the fact that they have seen all of the processes and templates before, and can now manage the project much more effectively.

- **Triple the savings on an ongoing basis:** Likewise, for the third, fourth and subsequent times that the project manager uses the standard processes; you can triple the base savings number. In our prior example of an 8% initial savings, the benefit of project management processes would be 24% of the project budget. Theoretically, a \$100,000 project with no project management processes would only cost \$76,000 after the project manager has already utilized the processes at least two times. This percent savings should not be any higher than the analyst estimates shown above.

### **Projects cancelled**

Planning projects more thoroughly and managing projects more closely may result in some projects being cancelled that might have been executed before. This is the result of more information being available regarding the total cost of the project versus the business benefit. If a project gets cancelled based on sound planning and management, you should take credit for this as a win for the organization, and the budgeted money not spent should go into the value side for project management.

### **Lowest level metrics require more details**

If you do not want to calculate value based on the analysts opinion, and you do not want to use a generalized reuse approach described above, you can look at the value associated with detailed aspects of project management. In this approach, you look at all the specific benefits associated with standard project management, and work with your customer to place a value on them. Examples might be.

- Savings associated with better managing client expectations.
- Savings from scope change requests that are made but not approved. You might conclude that one-third of them might have been implemented in the past without good scope change management, and you can assign one-third of the non-approved scope changes as savings to the project.
- There is value associated with accurate estimating. As you do a better job planning and managing the work, you should find that your project estimates become more and more accurate. You can agree with your clients on what this means to them. For instance, you might agree that it is worth 3% of the project budget to the customer if your project comes in within 10% of its estimate. This allows the client to better manage their financials and make better business decisions.
- Did all projects have workplans before? If not, then having a workplan now should result in better project management effectiveness. If the project were small, the



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savings would be debatable. However, the larger the project gets, the more you should feel comfortable assigning a percentage savings for the benefit of a workplan.

- If you managed risks well, and the resulting project was executed with few problems that could have been foreseen, then you would assume a benefit of a certain percent of the project budget.

Again, you would need to define the detailed criteria that would be applied to each project. Then as each project completed, the project manager and the sponsor would sit down and consider the value of the project management processes that were applied. You would not want to end up with more savings than the 30-35% that the analysts recommended. However, if the discussion turns out to show that the project took more time and costs more money, you would need to seriously consider what went wrong.

### Summary

Measuring the value of introducing project management question discipline in an organization cannot be done precisely. It is impossible to determine the value of culture change initiatives like this to a high-degree of certainty. However, given the limitations, it is possible to create some algorithms that can approximate the value of project management processes within the organization. You see that none of these approaches results in an absolutely valid and obvious benefit number. However, these approaches allow you to put some dollar value on the benefit received. Each of them allows you to show value at a high-level to executive management, based on a logical and defensible set of criteria and assumptions.