Ten Steps to Comprehensive Project Portfolio Management – Part 6
Tips on Steps 8 & 9
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This series of papers has been developed from our work in upgrading TenStep's PortfolioStep™.
For more information on TenStep's internal consulting methodology, please visit http://www.portfoliostep.com/0.0.0PortfolioStepHomepage.htm

In this Part 6 we will cover:
- **Tips on Step 8** – Plan and execute the work (Activation)
- Managing the portfolio
- **Tips on Step 9** – Report on Portfolio Status (Reporting & Review)
- Measuring the success of projects, within tolerances
- Portfolio variances
- The Earned Value technique

**Tips on Step 8 – Plan and execute the work (Activation)**

**Progressive activation of the work**

Project portfolio management is more than a one-time event that you perform once a year during your Business Planning Process. It is an ongoing process that you use throughout the year. When you build a financial portfolio of stocks, bonds and other assets, you must monitor and manage the resulting portfolio continuously or at least at frequent intervals. The same concept holds true when you are building a portfolio of assets. That means that the required work must be planned and executed throughout the year. In project portfolio management this sequencing of projects and Other Work is called "Activation".

Activation takes various forms. First, when the Steering Committee originally authorizes the work for the coming year, the portfolio managers need to plan for how the work will be staffed and when the work will start. Some of the portfolio work, like support and operations, should already have a staff in place that will continue to perform those functions. The staff may need to be reduced or grown, but the basic staff should already be in place. The project work, however, will need to be scheduled during the year based on priorities, deadlines and staff availability.

Management of the portfolio includes managing the resources, proactively communicating expectations, gathering progress status, confirming continued Business Case validity and project viability in terms of projected benefits. However, your business will undergo changes during the year that may, more likely will, call for new projects and perhaps deletion of others. Hence, if new work is added to the portfolio it could mean that other previously authorized work will need to be removed. This ongoing process of replanning and rebalancing the work based on changing business needs is all a part of portfolio management.

Portfolio management is a mindset. All resource allocation decisions are made in the context of how they will impact the overall portfolio objectives. The result should be that the performance of the entire portfolio is continuously optimized for the greatest benefit to the organization.
A brief word on staffing

For augmenting resources for portfolio work, there are at least three staffing options available. These are:

- **Hire a new employee.** Adopt this option if you foresee a long-term need.
- **Train or retrain current staff.** Do this if you have spare capacity. This is probably the best option from the view of existing staff and it also encourages flexibility.
- **Hire people under contract.** Do this if your need is only short term, especially if the need is urgent.

What is the right mix?

It is worth noting here that if more than about 25% of an IT project effort is outsourced, the learning opportunity provided by the project will likely be lost when the project is completed. This includes the knowledge and experience necessary for maintenance and support of the resulting product.

Managing the portfolio

The portfolio work schedule

Subject to the previous steps as we have described earlier, then the portfolio work schedule is directly related to the available resources. It may be necessary to go through multiple iterations of a staffing plan and work schedule before everyone feels comfortable with the work schedule. This is especially true for project work that may have business deadlines to meet and will obviously need staff available to work on them.

However, it should be borne in mind that individuals should not be expected to work on more than three projects at the same time. More than this simply reduces their efficiency to unacceptable levels because of the time taken to switch from one project area to another. The result of multiple project over-load is prolonged project schedules and delayed activities. So-called multi-tasking is not an efficient practice.

Project management

The actual work of managing individual projects falls under the discipline of project management and is well-established elsewhere.

However, from a project portfolio management perspective, your most important consideration is to ensure that all projects follow a consistent project management sequence so that you can track the portfolio as a whole. That means following a consistent project life span, with consistent high-level milestone documentation as described in our Part 3 under *The most important process: Design of a common project life span*, see Figure 3: Idealized high-level gated project management process.

The key to monitoring a portfolio of projects, consistently across all projects and without overburdening those responsible, is to ensure that these essential documents are prepared, approved, distributed and maintained on all active projects.
**Project management office**

Organizations around the world are implementing formal project management processes and disciplines to deliver their work initiatives on time, within budget and to an agreed upon level of quality. Part of the ability to execute better, faster and cheaper comes from an ability to implement common processes and practices across the entire organization. This way, there is a very small learning curve for the project manager and the team members as they transition from one project to another. This is because everyone in the organization is already familiar with the general ways that projects are planned and managed.

This is best accomplished by establishing a Project Management Office as we discussed in Part 3 under The Role of the Project Management Office.

**Technology management**

While project management should be standardized to the extent possible across all projects, this is not the same thing as managing the technology. The methodology that you adopt for managing technology should be that which is most suited to the technology vested in the particular project.

**Tips on Step 9 – Report on Portfolio Status (Reporting & Review)**

Portfolio management requires a commitment to metrics. Metrics are units of measurement used to assess, calculate, or determine progress performance in terms of monetary units, schedule, or quality results. Metrics are required to show how effectively the portfolio is being managed, and are required to show the value of the work that the portfolio produces. The reason you gather portfolio metrics and feedback on resulting products is to determine if you are meeting your portfolio objectives and where you should be improving your portfolio processes.

In general, the approach for measuring and improving the performance of a portfolio is:

1. Determine client expectations or help set expectations where none exist today
2. Establish objectives based on the expectations
3. Create performance targets (scorecard) that quantify the achievement of your objectives
4. Gather metrics throughout the year to determine how you are performing against your targets and to forecast whether you will achieve your objectives
5. Communicate the ongoing results of the metrics versus your targets to all appropriate stakeholders
6. Introduce process improvements as needed to ensure that performance targets and objectives are met

Some examples of metrics:

- **Total capacity.** Total capacity tells you how many potential hours your staff is available to work.
- **Utilization rate.** Utilization rate shows the percentage of time that people are actually allocated to categories of work. Allowing for overhead time, utilization rates should be in the range 75%-80%.
- **Available hours.** This is a forward-looking metric that shows how many hours people are unassigned in the future.
- **Downtime** (per person). This metric shows you how many hours people are unallocated. This can happen, for instance, if a person comes off a project and does not have another place to go to
immediately. It may also arise if a person is assigned full time to a task but is unable to start it because previous work is not yet completed.

- **Budgeted cost vs. actual.** These are basic financial numbers that should be tracked for each project in the portfolio and then rolled up at the portfolio level. If the total project budgets exceed their targets, it could mean that other authorized work will not be able to be executed.

- **Project budgeted schedule vs. actual.** All projects should be tracking their performance against their targeted completion dates. Again, if projects are tending to run over their deadlines, it may mean that other projects will not be able to start because the resources are still tied up on other projects.

- **Rework.** Reported from the project teams.

- **Defects.** Reported from the support teams.

- **Client satisfaction.** All projects and operations and support teams should be reporting some kind of customer satisfaction metrics.

- **Benefits realization.** Reported by Operations managers. These metrics may be more difficult to collect because of the difficulty of isolating the benefits of individual products versus the improvements experienced by whole departments.

### Measuring the success of projects, within tolerances

All projects should establish a scorecard that describes what it means to be successful. This should include project management metrics covering estimated effort, project duration and cost, as well as client satisfaction with the process. It should also include technical metrics such as defect rates, rework targets, and other important product characteristics. When you are defining your metrics, make sure you build in the idea of target tolerances.

Tolerances are a way to build in "reasonableness" – there is no such thing as perfection in project management! Your organization should establish the tolerance levels that they consider acceptable for project management. For instance, a normal tolerance range for a typical project might be plus or minus 10%. That is, if you delivered the project for no more than 10% over budget, it is still considered a success.

The problem with setting reasonable tolerance targets, however, is that project managers may come to conclude that, in addition to a contingency allowance, they have a sort of "unofficial" allowance of another 10%. Another issue is that any such "forgiveness" should be tied to the risk level of the project in question. It is not reasonable that a project involving entirely new technology should be tied to the same tolerance as a standard run-of-the-mill type project.

Declaring success from a project management perspective is normally what the project team is asked to be accountable for. But from a project portfolio perspective, it is the quality and performance of the product that brings value to the organization. So, the ultimate issue is whether the organization received the value that was promised from the original benefit projections.

However, whether the expected benefits are actually harvested from the product usually depends, not on the project team, but on Operations management. That's why the project team is typically held to the narrower goals of project management. Nevertheless, if the project was a failure from a project perspective, the chances are that it will also prove to be a failure from a corporate perspective as well. (This is not always the case. You may complete a project over budget and schedule, but the organization may still gain value over the long-term lifetime of the product.)
Conversely, there are also many examples of projects that were successfully delivered, yet are not delivering the value promised. If the project team delivered successfully within tolerances, there is usually nothing else that can be done from their perspective. However, in a portfolio, the overall business value derived from its projects should be monitored over time by the portfolio team after each project has been completed.

**Portfolio variances**

*Current projects exceed authorized budget*

If a project budget overrun is small and incremental, the Steering Committee probably needs to go ahead and approve the excess. However, if the cost overrun is substantial, it may require that the entire Business Case be re-validated for that project. A project that makes great business sense at a certain investment level may not make as much business sense at a higher cost level. Money that is already spent must be considered a "sunk cost". The question is whether the additional funding is better spent on this current investment or whether the money would be better spent on the next high priority project.

It is always a dramatic step to cancel a project that is in progress, but if the Business Case no longer supports the investment, canceling the project may be the right and proper course. Sound portfolio management requires that you cut work that no longer makes business sense.

*Current projects exceed estimated deadline*

Some projects may not exceed their budget, but they may still miss their required deadline or they will end up taking longer than estimated. This situation has the added complication that this usually means that resources are tied up on this project rather than being able to start on new projects. This is a concern for all subsequently scheduled projects because they are being delayed not by lack of budget but by not having the required resources available.

**Quality Assurance on Outsourced Projects**

Outsourcing of project work is even more common today. However, even though you outsource the work, you cannot outsource your obligation to make sure the project is progressing smoothly. If all goes well with the outsourcer, you have less direct work to do. Unfortunately, in many instances, the outsourcing vendor does not perform against expectations. If that happens, you want to know about it as soon as possible.

Even though work is outsourced, you still have responsibilities that cannot be performed by the outsourcer and must therefore be done in-house. This includes: arranging the required in-house participation or interfacing and working space if applicable, coordination with in-house units and integration with their work during cutover, checking progress payments and seeing that they get paid, and so on. So, it is usual still to assign the project to an in-house project manager, but the roles are obviously quite different.

Instead of assigning the work and managing detailed issues, scope, risk, quality, etc., the in-house project manager is responsible for making sure work is being done on time and the project is progressing as it should. He or she is therefore "directing" the work rather than "managing" it, which is why that
person is often referred to as a "Project Director". Nevertheless, he or she is still held accountable for the success of the project.

**Estimate to Complete**

Managers performing a supervisory role inevitably ask questions such as "How far along are you?" and "How are you tracking against budget?" These questions are vague, and so the equally vague answer of "Yup, we're pretty close to schedule" sounds like an appropriate response. You might even hear the equally vague "we're about half done" or "we're 90% complete." If the project manager does not have a valid work plan, or if he or she is not keeping the work plan up-to-date, the answer is pretty much a guess. In project portfolio management that simply is not good enough. (It isn't good enough in project management either!)

However, if there is a good, up-to-date work plan, a good project manager will have a sense of how much work is remaining and how long it will take. But the total numbers at the end of the project can only be determined with a reasonable degree of accuracy if the project manager has a clear idea of where the project was at, as of the last reporting date. The project manager must then conduct a review of all the remaining work as now contemplated and do a careful estimate of how much effort that will take and for how long.

Often that is not a trivial exercise on a medium to large project and hence should be called for only at less frequent intervals than the regular reporting periods. If the project were being reported weekly, then a rigorous estimate to complete would be required, say, every month. If the project is longer and is being reported monthly, then every quarter.

**The Earned Value technique**

From a project portfolio perspective, "value" is derived from the product of the project, something that can only be realized once the project is complete and the product delivered. Hence, if a project gets canceled 90% through to completion, the business value might well be zero. The Basic Concepts of Earned Value are quite different.

Earned Value is a technique for measuring project progress, not product value. It looks at "value earned" relative to what was expected according to the project's budget and schedule. So, you are earning the value of the project on an incremental scale as the project is being executed. When 50% of the work is completed, you can say that 50% of the value of the project has been realized as well. If, at this point, you have only spent 50% of your budget, then you are right on target.

Earned Value metrics were established to remove the guesswork from where you are in relation to a baseline. In theory, this concept is very elegant and interesting. Using it allows a project manager to know precisely how far along they are, how much work is remaining, what the expected cost and end date will be, and all sorts of other interesting information.

Unfortunately, the necessary measurements of project status in terms of cost and schedule for a project in "mid flight" are not easily obtained without meticulous care – and perhaps even then only by making estimates of work in progress. Further, remaining work still has to be estimated, even though better productivity factors may have been determined from recent work. Still, there is a lot of time-consuming estimating involved. Moreover, this is particularly difficult in IT work where intellectual work is
involved that is difficult to quantify.

Consequently, all of this estimating tends to undermine the claim of removing the "guesswork" out of status reporting. This is probably why the technique is not used on projects generally, unless it is mandated by contract or government fiat.

**Coming next**

In Part 7 we will provide tips on Step 10.