



TenStep Supplemental Paper

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Use Portfolio Management to Maximize the Value of Your IT Spending

No company has the resources to meet all of the business requests placed upon it. This is true in the best of times. It certainly is even truer when times are tough. Even if your company is the rare one that has all the money you need, you certainly do not have all the people capacity to complete everything you would like.

The typical response to managing scarce resources against unlimited demand is to come up with some type of prioritization process to ensure that the approved work will provide the most value. As you peel back the onion layers, however, you get the inevitable question of how you know that you are applying resources against the highest priority and highest value work.

This is a tough question to answer, and it certainly cannot be answered in isolation. What you really need to understand is your overall business strategy and where you are trying to move your company. Then you have some context in which to make decisions about what work is most important. In fact, you may turn down projects that have a huge return on investment because the project does not really help you execute your business strategy.

You've heard of financial portfolio management

Many people are familiar with the term "portfolio management" in the financial sense. You want to manage your money in a way that maximizes your return and minimizes your risk. This includes understanding the different investment alternatives available and picking the ones that best meet your overall financial goals. One size does not fit all. The investment decisions you make are different if you are 30 years old than if you are 55. You don't look at each investment in isolation, but in the context of the entire portfolio. For instance, you may have a bond fund that is not doing as well as your stock funds. However, you may decide to keep it because it provides overall balance to your entire portfolio and helps reduce your overall risk. Depending on market conditions, you may find that your stock funds are suddenly down, but your bond fund is now providing the counterbalancing strength.

Enter business portfolio management

In more recent times, this same "portfolio management" concept has become popular as a way to manage business investments. At a high-level, many of the same concepts are involved. You have a limited number of resources to apply to your investments. You want to manage these resources as a portfolio to maximize the overall value and to allow you to reach your goals.

Let's focus now specifically on the IT organization. Portfolio management is a way to plan, prioritize and manage the totality of work that is in the organization. Furthermore, it helps you come up with the baseline that you use to subsequently measure how well you are managing the portfolio to meet the company's needs.



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Just as with the financial portfolio, the first place you need to start is by gaining an understanding of who you are and where you want to be in the future. You cannot start a portfolio management process by simply putting a prioritization process into place. You can't prioritize work unless you have a context to guide your decision making.

Start by understanding your organization and where you want to be

If you go way back to the beginning, the place to start is with a Current State Assessment. This assessment tells you about your organization today. You need to describe your organization mission, vision, strengths, weaknesses, capabilities, products, services, customers, stakeholders, values, etc. This is not an easy assignment, especially the first time you do it. However, after you do it once, the subsequent yearly update is not nearly as time consuming.

After you know where you are today, you need to define how your organization wants to look in the future – usually in a three to five year horizon. This is the Future State Analysis. The Future State Analysis should be structured similarly to the Current State Assessment. Where should your organization be in five years in terms of its capabilities, strengths, weaknesses, products, services, etc? The key is to understand where the business wants to be in five years so you know how the IT organization needs to look to enable and support the changes.

Next, compare the Current State of your organization against the future state to create a Gap Analysis that shows what has to change to get you from where you are today to where you want to be in the future. The Gap Analysis, in turn, leads to your IT Strategy.

Strategy

All of the prior work was done to create a viable IT Strategy. The strategy is a high-level set of directions that articulates how the organization will achieve its mission and move toward its vision. It provides the overall framework and context that is used to make decisions on how the organization moves from its current state to its future state.

The IT Strategy is important because it provides this context under which you can make prioritization decisions. For example, let's say you receive a proposal to save a substantial amount of money by rewriting a business solution using newer technology. Do you do the work? In the past, you might have looked at the ROI and if it looked good, the project might be approved.

When you manage your project as a portfolio, however, you don't look at projects one at a time, but as pieces of a larger puzzle. You would check your strategy to see whether this type of project will help you get to your future state. If it does not, it should be rejected – even if it has a compelling ROI. If it falls under your strategy (say, to reduce costs and be more efficient), you would still need to balance the project against all of the other projects in the portfolio. If your portfolio is filled for the year, you would need to determine what work will not get done so that this new project can be completed. If you are able to get incremental funding, you need to compare the relative value of this project with other work that is also important, but could not be scheduled initially. What you may find in this example is that unless the savings are compelling and real, this project



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will not get approved since it does not appear to move the company forward from a business perspective. Technology replacement that results in the same business capability is rarely as important as using building new capabilities for growing the business.

Once you know the scope of work, you can look into how the prioritization process works.

Defining the portfolio

Portfolio management can be practiced at the company level or the organizational level. To practice this concept effectively, you need to understand the scope of work that is included under the portfolio umbrella. If you are talking about a company-wide portfolio, all the organizations and senior managers need to be a part of the process. If you are talking about one organization, then the scope of the portfolio is narrower.

Once the organizational scope is defined, the second question is to understand the scope of work included within the portfolio. It makes sense that all project work be a part of the portfolio. However, you should decide if your support work will also be included. (Support meaning maintenance and all continuous operations.) The other category of work would be management and leadership.

From a practical standpoint, this decision is important. If you decide to only include project work in the portfolio, you will be managing all new investment decisions. However, if you also include support work, you will have the opportunity to balance the project work against the support work. This will allow you to determine, for instance, whether the new investment required for a project is more important than the support of existing applications. It may turn out, for instance, that you are willing to live with a lower service level of support in certain areas in exchange for freeing up resources in areas that build new capabilities.

Likewise, if you include management and leadership activities in the portfolio, you have the opportunity for tradeoff there as well. For example, you may decide that investing in increasing the project management competency of your organization will provide more long-term value than a specific project for upgrading server capacity. (On the other hand, it may not be as important. However, having this work included on the table for discussion allows you to consciously make the prioritization decisions.)

Prioritizing work

Generally, there are two points when organizations make prioritization decisions. The first is at defined points when you do formal business planning. The second is when new work surfaces during the year and needs to be evaluated at that time. Most companies have a defined business planning cycle. Typically this occurs on an annual basis. Depending on the size of your organization, this might start four to six months before the end of your fiscal year.

The job might be more difficult in the IT organization since you must first try to understand the business priorities and strategies of the business client organizations, and then come up with a plan of attack to enable the business to meet its goals. This should be



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a two way discussion between organizational partners, not an order taking process. The business should explain what they are trying to do, with the IT organization offering advice on how IT products and services can help them.

Regardless of how the initial planning process proceeds, at some point you have identified the amount of work that is requested for the coming year. This work is always more than the company is willing to pay for, and it is also more work than what you have resources to accomplish. This is where the portfolio prioritization process comes in. It works something like this:

1. **Mandatory.** This is work that you have to do. It might be work to support a legal or auditing requirement. If the year was 1999, this could be YR2K work. However, generally speaking, you don't have the discretion to say you are not doing it.
2. **Business critical.** This is where you start to look at work that is not mandatory, but must be done to support the business. However, one of the key aspects of this work is that you have some discretion over how much you spend. Support, for instance, could fall under this category. You know you have to support the existing IT environment and business applications, but you may be able to make tradeoffs in terms of what you spend.
3. **High priority.** Now you start to look at work that you think must get done. You might break this work into two more areas based on the impact to the business – strategic and tactical. Strategic work is usually larger and more expensive, but helps you transform the business. Tactical work usually costs less and has a more short-term payoff. However, the value is incremental, not transformational.
4. **Everything else.** Everything else goes here. It is possible to break this work down into medium priority or low priority, but usually neither category of work will get funded. Low priority work should certainly not get funded. Approving low priority work is throwing money away.

The prioritization process takes place with input from IT and the client organizations. It can be a very difficult and tortuous process. However, the IT organization must facilitate the discussion since not all of the requested work can get done. Of course, you are looking at the project ROI, but you are also looking at alignment to strategy. Projects with a huge ROI may not get funded if they do not align to strategy.

Internal IT work is included in the prioritization process. So, the discussions end up trying to balance the overall business value of a new application to support key Marketing programs against a Manufacturing project that will reduce shipping time to the customer, an IT initiative to upgrade all the company desktops to a new OS, and a Human Resources initiative to support changes to the employee benefit package.

Once the work is finally prioritized at a high-level, an overall funding request is made. The company then comes back and tells each organization what their budget will be for the coming year. Normally, you then apply this budget funding to the approved list of work, starting with mandatory work and moving down through the priorities until the



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funding runs out. The remaining work will not be funded unless the business situation changes favorably to allow more funding, or the work priority changes during the year.

Scheduling the work

Let's assume at this point that all of the major work for the year has been prioritized and approved. Of course, this is not always a clean process, and many times you start your fiscal year without approved budgets and projects. However, somehow every company gets through the process and ultimately has approved work and an approved budget.

At this point, most companies divvy out the work to the various internal departments that will be responsible for execution. However, in portfolio management, the high-level plan for carrying out the work is maintained centrally. The senior managers work as a team to map out the workload for the year, taking into account:

Support. Normally support staff is kept pretty steady throughout the year. The support resources should be in place at the end of the previous year, and they will continue to perform their jobs into the new year. There may be changes in priorities that will require fewer or more support resources.

Carryover work. Important work that is in progress needs to be continued. You can't just stop this work and then start it up later.

Business priorities. The IT resources need to be aligned to support the highest priority projects first. This staffing is coordinated with the client organizations. For instance, if the Marketing Division starts an initiative that requires IT support, the IT resources need to be aligned and ready to start as well.

Capacity. It's a given that all the business units will have high priority work they want to get done right away. However, you don't have the capacity to do everything at once. Managing the portfolio means that the totality of work needs to be prioritized across all the divisions. This might mean, for instance, that multiple initiatives from the Sales Division are worked on first, while the Finance Division priorities are deferred until later in the year.

Keep your eye on the totality of work in the portfolio

Most organizations manage work by focusing on projects in progress. Once a project is completed, it is forgotten by management. There is some sense of future work in the pipeline, but mostly just awareness that the work is approved and will hopefully be staffed and executed at some point.

One of the features of portfolio management is the need to keep visibility on the entire portfolio. This includes work that you have completed, work that is in progress and work that is planned for the future. This way, you continue to manage the body of work as a portfolio. Again, think of the work as a puzzle. You need to keep track of all the pieces if you want to successfully complete the puzzle.

Work in progress



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Most management teams are used to focusing on the work in progress. The difference with portfolio management is that senior managers deal with all of the work within the scope of the portfolio, not just the work that is within their functional organization. This visibility does not just include projects in progress, but the support work as well. The management team must have feedback on how all of the work is progressing. This is typically done through the status reporting process. Many organizations use high-level summary reporting that includes a stoplight indicator of green (okay), yellow (caution) or red (trouble) so that the managers can instantly focus on areas of trouble. Remember that the portfolio of work has been scheduled out for the entire year. If one project goes over budget and deadline, it is not only a problem for that project, but it is also causing trouble for the portfolio. If a project ends up going over its end date by 30 days, it is very likely that some other approved work will be delayed by 30 days because the planned resources will not be available. If a number of projects are delivered late, there may be approved initiatives that cannot be started at all.

Future work

When you are managing work as a portfolio, you must create a plan that schedules out the work for the entire year. You don't want to be in position where a major project ends and you are not sure what to do with the available resources. Likewise, you do not want a client organization to begin a major initiative only to find out that IT does not have the resources available to support them.

Just as a project manager schedules out the detailed activities on a workplan, the senior managers need to work with their clients to create a master schedule of work for the portfolio. Just as the project manager must continually update the workplan, the portfolio schedule must be evaluated on a monthly basis as well. The portfolio schedule must be updated to reflect the current projected end dates of projects in progress, as well as changes to client priorities during the year. If possible, you would like to schedule a smooth staffing line throughout the year, but the timing of work from a business perspective may not allow it. In those cases, you may have to bring in contract staff to handle peak workloads.

Completed work

It is important to keep track of completed work to determine if the business value is being achieved. In most organizations, this is a missing step. The IT team needs to work with the business clients to track the benefits of the work. This information is used as feedback into future decisions.

The other reason you need to track completed work is that most projects deliver products that must be supported. Remember that support work is also a part of the portfolio. So, it makes sense to understand the cost and benefits of the project, and then continue to track costs and benefits of the solution throughout its lifespan.

Nothing stays the same for long



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The job of managing a large portfolio of work would be difficult enough if everything could be executed as planned. However, you know that you rarely have that luxury. Instead, you barely have time to get a stake in the ground when business changes put your carefully constructed plans in flux. You know the causes. Profits and revenue are down. Budget cuts are required. New management comes in with different priorities. Your company acquires another company. Government regulations change. Someone comes up with a new, great idea.

The first thing to note is that there is nothing wrong with change. In general, change is good. You will find that when business conditions and business priorities change, the approved work within your portfolio may need to change as well. The question now is to determine the best way to make the changes required.

If you manage work as a portfolio, you should be able to respond intelligently. You should already have an up-to-date portfolio plan that accounts for all the work going on today, with a mapping of how and when the remaining work will be scheduled. When work priorities change, you should go back to your previous prioritization process to determine how to proceed.

Approved work may be cancelled

Sometimes changes in business priority mean that previously approved work is stopped or canceled. In this scenario, your portfolio team now should have additional capability to do other work. On the surface, you might say that the business unit that cancelled the project should be able to approve a replacement. However, in true portfolio management, it does not work like that. Instead, all of the stakeholders are informed as to the current status, and all of them should have a chance to offer up their highest priority work as a replacement.

For instance, let's say a Manufacturing project is cancelled because of priority changes. All of the stakeholders need to have input into the new plan. It may turn out, for instance, that a Marketing project may have higher business priority than a substitute project from Manufacturing. It is also possible that your organization may have been relying on a number of contract resources to complete the Manufacturing project, and a viable alternative may be to not hire the contract resources and not to approve a replacement project at all. Another scenario is that Manufacturing is cutting back on projects because of a need to cut the budget. You may find yourself in a position where staff is laid off for business reasons rather than working on replacement projects.

New work is identified

The other scenario that happens frequently is that new work comes up that was not identified in the earlier planning process. Should you just go ahead and add the work? Although that is what the business wants, you can't do it. If your planning process was successful, you already have a full plate of approved work for the entire year. Besides that, typically you are fighting to just complete the approved work you already have. Project delays in some areas may make it difficult for even all of the approved work to be completed.



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Instead, you have to go back to your major stakeholders for help re-prioritizing the work. You wouldn't even get this far if the new work was not of higher priority than other previously approved work. The question now is whether you receive incremental funding to do the new work, or whether something that was previously approved gets bumped. If you get incremental funding, you may be able to make everyone happy – assuming you have the capacity within the portfolio to do the extra work. However, if you cannot get new funding, then one or more projects that were previously approved need to be postponed. Depending on how you did the initial planning process, you may have a sense for the relative priority of all the approved work, and you may have to drop the ones on the bottom of the list and then slot the new work into the appropriate spot. For instance, if you approved forty projects for the year, you may have to drop the lowest three projects to make room for a new one, and the new project might be slotted at number 20 in priority. Again, this process can be painful since other business units may lose their projects to make room for new work in another division. The good thing from an IT perspective is that the business unit managers are collectively making the priority decisions.

Changes result from not meeting expectations

Changes also evolve as a result of normal fluctuations in approved work. For instance, if approved projects start to go over their budget or deadline estimates, you could be in trouble. This situation will be offset somewhat by any projects that come in early and underbudget. However, it seems like there are never enough early ones to make up for the late ones. As you are updating and rescheduling the portfolio each month, you may find that you cannot get all of the approved work done. Your first priority will be to put corrective action in place to try to get on target for the portfolio. However, if you cannot, you will need to get the clients involved to determine if you can get incremental funding to cover all the work, or whether some projects need to be dropped. Remember that just because a project starts later in the year does not mean that it is a lower priority, so the process of determining what work will be postponed and then rebalancing the work for the remainder of the year becomes even more complex.

Create feedback loop to successfully manage your portfolio

There are two levels within the portfolio to measure. The first is to determine how successfully you are delivering the underlying projects and support within the portfolio. The second is how you are planning, managing and controlling the work at the portfolio level. For instance, you could be doing an excellent job scheduling and managing the portfolio, yet there could be major problems actually delivering the underlying projects and support work. To be totally effective, you need to be doing well at both levels.

Detailed feedback

You must receive accurate and timely feedback to effectively manage the current work within the portfolio. Normally, the mechanism for gathering this feedback is the status reporting process. There are many ways to report and collect this feedback, including status report documents, email updates, voicemail, etc. The status of all the underlying



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work is typically summarized at the portfolio level. One effective technique is to have one or two lines of information for each project and support area within the portfolio. Each project and support area is represented by a color that indicates whether the work is okay (green), at risk (yellow) or in trouble (red). There should be criteria to categorize each initiative within the color scheme. There should also be an ability to drill down for more information on any initiative.

Status reports allow you to track work while it is in progress. When projects are complete, you should also collect information on how successful they were. Projects should have a scorecard that describes their success criteria. This typically includes cost, schedule and quality targets. After the project is complete, the team should collect the appropriate information to determine whether they were successful. The results are then summarized at the portfolio level.

The portfolio-level summary can be in two forms. First, you can report the detailed project targets and actual results from each scorecard. This can be especially valuable if all projects in the portfolio follow a standard and consistent scorecard format. An alternative is that each team only reports whether they successfully met their scorecard criteria. For instance, you may have ten projects that were completed this month. Eight of them may have successfully met their scorecard criteria for budget, nine met their scorecard criteria for deadline and seven met their scorecard criteria for quality. This allows you to make some general conclusions at the portfolio level without having to know the exact detailed scorecard criteria of each project.

Likewise, the support teams provide similar feedback. The support teams should have success criteria in terms of service levels, availability, quality, etc. Since the support work does not technically “end,” their data collection takes place quarterly and is similarly summarized at the portfolio level.

Portfolio-level feedback

It is important to collect additional feedback information at the portfolio level. The portfolio should also have objectives that describe the criteria and targets for success. For instance, you might have a portfolio objective that 80% of all projects will meet their budget and deadline targets. The input for these portfolio objectives will come from summarizing the results of the projects and support work within the portfolio.

The second place for portfolio feedback is through feedback from all the major client stakeholders. This feedback can come from a combination of formal surveys, group meetings, one-on-one discussions, etc. The clients should provide feedback in areas such as how effectively the planning and prioritization process were, how effectively the portfolio is being managed, the proactive level of communication, the business knowledge within the portfolio, how easy the portfolio management team is to work with, etc.

Portfolio dashboard

Once you determine what type of feedback you need to receive, you can design a portfolio dashboard to display the feedback. Typically, the dashboard provides a



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summary of all of the key metrics feedback in an easy to read and graphical format. The managers of the portfolio should be able to see quickly whether there are problems or risk areas and then drill down to find the details.

Process improvements

The reason you gather metrics and feedback is to determine if you are meeting your objectives and to improve your processes. For instance, let's say you have an objective that 80% of all projects will meet their budget and deadline criteria. If your monthly metrics show that you are only meeting the criteria 60% of the time, you are obviously failing. Further investigation should help determine the causes and corrective actions that should be undertaken to improve these numbers. Likewise if a quarterly survey reveals that your clients rate you low on your communicating skills, you have time to improve the communication channels to ensure the clients are getting the information they desire.