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Manage Your Project Portfolio, Second Edition

Increase Your Capacity and Finish More Projects

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Manage Your Project Portfolio

Second Edition



Increase Your Capacity
Finish More Projects

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Iterate on the Portfolio

If you want to consciously make portfolio decisions rather than have the projects whip you around, you'll need to plan how often you will want to review and adjust the project portfolio. If you don't plan to iterate, you'll have emergency projects ([*Signs You Need to Manage the Project Portfolio, on page ?*](#)), which throw the whole organization and the portfolio into disarray. If you plan your iteration period, you'll prevent emergencies and help the project teams make the most of their time for their projects.

When most people slot their projects into a portfolio, they easily have twelve to eighteen months of planned work in the portfolio. That's way too long. You can't possibly predict the future a year in advance.

At some point—way before you finish the projects—something happens, and you'll need to readjust the portfolio. You and your colleagues must determine how often you need to review the portfolio so you can adjust the relative priority of each project and the staffing or funding for each project.

Reviewing the portfolio includes the actions of planning and replanning the portfolio. Your job is to make decisions as you review.

Decide When to Review the Portfolio

You can plan for the adjustment in a portfolio review, but how often should you review the portfolio? Too often, and you aggravate everyone involved, because nothing has changed. Not often enough, and the projects underway have no relationship to the list of staffed and unstaffed work. Match the frequency of your portfolio review to your development style, and make sure that if you're using a serial life cycle, you don't wait until the end of any project. If you use incremental funding for your projects, make sure you review in enough time to fund the next cycle of project work.

If you're using iteration boundaries for your projects, that's a good time to review the portfolio. If you're using a serial life cycle, review the portfolio at least quarterly to ensure the projects are still valuable. If you opt for more frequent reviews and decrease the project scope, you can avoid or better respond to emergencies. With an iterative or incremental life cycle, you can review the portfolio after the teams complete a prototype or a feature chunk.

If you plan to review and readjust the portfolio periodically, your project teams will adjust to your time period. That's because you need a demo and data to make decisions about committing to the project again. If you explain to the teams what results you want (a demo and project progress data) and you tell them when you need it, you'll get it.

You might need to review the portfolio when release dates change, when your customers want something new, when your competitors announce or release new products, or when new technology is possible. Because you can't control most of these events, you'll need to be flexible about your review cycle. But you do have ways to decide when is the right time to review the portfolio.

The ideal time to review the portfolio is

- When a project finishes something you can see (the project cycles)
- When you have enough information about the next version of a product (the planning cycles)
- When it's time to allocate budget and people to a new project (the business cycles)

These cycles are interdependent. Here's a true story about how one group recognized the interdependencies.

Competing Product Managers

by: Leah, Product Manager

We had one development team and two product managers, Alex and me. I needed the development team to work on my product upgrade. I made an appointment for a one-on-one with Alex to work it out.

I asked, "Alex, I need the development team to work on my product upgrade. When are they going to be done with your product?"

"Not for another three months."

I sat up, concerned. "Wait a minute. You've had that team for six months already. My product needs another release sooner than that. I have requests from our customers, and the corporate roadmap says I need to release in just three months. If they can't work on my project, how can I get a release out in three months? What's the delay from?"

Alex sighed and said, “Well, we had trouble getting the requirements done, so that was a delay. Then we had trouble with the functional specs. It turns out the requirements were still a bit vague, so we had to revisit everything during the spec stage. I insisted that they work on all the features at the same time, so the testers can’t start because nothing is done enough for them to test.”

I left and walked around the floor a couple of times to calm down. What was I going to do? I turned around and strode into my manager’s office. I said, “I need help. I won’t get the project team for months. I’m so frustrated. We need to work toward the whole organization’s goal, not just one product manager’s goal.”

Alex and his managers made several classic mistakes:

- Thinking that his project was alone—not considering the rest of the portfolio in his planning
- Insisting on a serial life cycle when there was a known time constraint for his project
- Not encouraging the project team to implement and test by feature, so they could stop at some time, even if that time was not when the project would complete all the requirements

If Leah and Alex—or their management—had reviewed the portfolio more often, Alex would have avoided the first mistake of thinking he had the only project and would have had a chance to revisit the other mistakes earlier in the project. Without *someone* making portfolio decisions, Alex quite correctly thinks he has access to all the people he needs for as long as he needs. That’s fine for Alex’s project, but not for the rest of the organization.

Select an Iteration Length for Your Review Cycles

Your project portfolio review cycles depend on the choice of life cycles for your projects and how long the projects are, on how frequently you need to plan or replan the product roadmap, and on how much budget planning and replanning you need to do.

Project Life Cycles Affect Project Portfolio Management

Because your review cycles depend on your projects’ durations, you’ll need to adjust your iteration length to match your projects’ durations. If you use an iterative, incremental, or agile life cycle, you have opportunities during a given project to review and replan the portfolio. But if you use a serial life cycle, such as a waterfall or phase-gate, your portfolio review cycle is the entire duration of the project. If you contain the requirements, the team is familiar with the product, they don’t run into technical difficulties, and the

schedule is short enough, then you may be able to make serial life-cycle projects work for your portfolio management.

But too often, I see time-bound projects with high technical risk try to fit everything into a serial life cycle for a project that's more than three months long. That's not a recipe for success, for the project, or for managing the portfolio. Instead, consider another life cycle for your projects.

If one project takes longer than six months to complete, you are deciding not to staff other projects that might need to start, and even finish, before the team is done with their original project. If you feel enough pressure, you'll ask people to work on more than one project, leading to multitasking and waste. Help the project team choose a life cycle that fits your business requirements of when the project needs to finish and that fits your time need to review the portfolio. As an organizational leader, this is where to put your energy.

If you use an iterative life cycle and integrate the product as you proceed, leaving only final testing for the end, your project portfolio review cycle can be as short as the time it takes to implement one feature, integrate it, and test it. If you use an incremental life cycle, such as staged delivery, your review cycle can be as short as the time it takes to finish one feature. If you're using an agile life cycle, your review cycle is the duration of one timebox, not more than four weeks long.

If one of the projects in your portfolio requires many features and a tight schedule, the more you want that project team to use an agile or incremental life cycle. Because the project team completes features inside a timebox, you have the most flexibility in replanning the project portfolio. You might not care what kind of a life cycle you use for a relatively mature product, assuming you don't want to release it more often than once a year or so, and you don't need that project team for other work.

The more projects compete for fewer project teams, the more you need an agile life cycle for your projects. If you have only a few projects waiting for project teams, you might be able to use an incremental life cycle. But if you have many more projects than you can staff, it's time to move to agile. You can't get the throughput out of your teams and the ability to decide and change quickly in any other life cycle.

Two Teams, More than Twenty Projects

by: Paul, CEO

We're a small software company doing custom development, and we want to retain our independence. We can pay people the way we want and not have to answer to anyone if we stay independent. But a couple of years ago, we were in trouble and were considering looking for financing.

We had way too many projects to do and not enough time or people to do them. We had only two project teams and about twenty-two projects. At first, I told my VP that we needed everyone to work on more than one project at a time. That didn't work. So, I told him to find another way.

First, he had all the project teams work in timeboxes so we could see what they could do in three weeks. Then he changed things so they were implementing and testing by feature inside the timeboxes. That worked really well, because we could demo to the customers. If the customers wanted some time to think about it, we could say, "Take three weeks. We'll be ready for you then." We got great feedback from them.

Long story short, we started using two-week timeboxes. We still have a ton of projects—way more than twenty now—and we're able to juggle things because we know how to slot the work into the portfolio, and we can allow our customers enough time to review our work to date. Some of our customers know they have a three-month wait before we'll show them the first demo, and they are willing to wait because of how we work with them.

Now, when we close a contract, we work with our customers to slot them into the portfolio. We always have people working on only one project. And, because people are so focused on one project at a time, they really learn the guts of the product. They're much faster on that project, and they can take their knowledge and apply it to the other projects more easily.

Product Roadmap Planning Affects Project Portfolio Management

It makes sense to make your planning cycle—the readjustment of the product roadmap, which features you want in which quarter—occur every quarter, especially for less mature products or for a market in flux. If you're using an agile life cycle, you can readjust the roadmap every timebox, fine-tuning which features the project team will finish when, as well as when you can release the product.

With an incremental life cycle, you have almost the same flexibility as with an agile life cycle, but you'll have the project startup time, plus the varying time to complete a feature. For an iterative life cycle, you'll have to allow for the time to add in all the prototypes for a given feature and test it. For a serial life cycle, you'll have to restrict the number of requirements you can address in one project to meet your need to review the portfolio.

Knowing What We Want in the Product When

by: Steve, Product Manager

I've always kept a roadmap for my products, but I wasn't very specific about when we wanted which features. It's a big product, and I honestly thought it didn't make much of a difference, until last year.

Last year, my management finally decided to stop multitasking. They told all of us product managers that we needed to provide two things: a quarterly list of features for our products for them and a ranked product backlog for the project team. Anyone who didn't have those two pieces of information would not have funded projects for the quarter.

One guy decided he wasn't going to—he was working on the product requirements document (PRD) for the company's flagship product. They didn't fund that project for that quarter. That turned out not to be that big a deal; they'd just released a major version, and there's no way he could have finished the PRD in time for the project team to work on the project.

That made the rest of us realize our management was serious. We now all have quarterly product roadmaps for at least two quarters out. I have ranked product backlogs for all of my products—only the first twenty to thirty requirements are ranked, because the teams never do more than that in a timebox, and usually less. I actually have more time to talk to my customers and see what they think of our demos and what they want for the future.

As a manager in the organization, work with your peers to create or use product roadmaps so you can anticipate what projects need which life cycles and which people when. Use your political power to influence the project managers and first-level managers to use timeboxes wherever possible and to implement by feature. That way, as the project teams implement the features and as the product roadmaps evolve, you and your peers can make better and faster portfolio decisions.

Budgeting Affects Project Portfolio Management

Many organizations budget once a year. Everyone is supposed to pull out their magic wands and crystal balls and see the future perfectly.

Well, I don't understand how to predict the future, and I can't tell what the competitors are going to do—and neither do my clients. The result is that managers and project managers spend crazy amounts of time forecasting the budget, and by the third month into the fiscal year, the budgets are all wrong.

Since the budget is wrong in three months or less, we'll move to rolling-wave budgeting along with rolling-wave portfolio management. We'll still create a budget target for the year, but we'll allocate funds only for a maximum of three months. If you're using an agile life cycle with a shorter timebox than three months, you can have a budget cycle as short as the timebox.

Instead of thinking about the budget driving the amount of time and the number of features, use a fixed time and a fixed budget to see how much value you can deliver in that time period. The money folks commit to some money for some amount of time—as little as a month if they want—and you commit to some set of running, tested features at the end of that time.

The money people cannot change funds during this time. If you're using a non-agile life cycle and you don't have an interim deliverable for six months, the money people have to keep their commitment for six months. What happens if the economy crashes and you need to revisit your strategy and your decisions? Revisit. But this is why an agile life cycle provides you with the most flexibility.

Most of the time, you don't have dramatic strategy changes. Most of the time, you want to make smaller course corrections that allow you more flexibility. When the money is fixed and the time period is fixed, the iteration is stable enough for the project team to create a valuable product.

A side benefit of rebudgeting more often is that you don't have to create a detailed budget for everything—you just have to budget for the foreseeable future. You'll spend less time budgeting and more time seeing what you need.

An additional benefit is that for a non-agile life cycle, the project team has to reestimate how much longer they will need to finish the project. Too often, project teams have no idea how much time they need. If their estimates are off, they will gain feedback on their estimates and become better estimators.

For you project managers, even if you can't use an agile life cycle, you can use historical information to organize your project and its budget. If you know from past experience that your budget will change sometime between the six-week mark and the four-month mark, you can plan to deliver something valuable, such as a demo, a prototype, or running, tested features every six weeks. That way, you've shown value each budgeting cycle. You'll get more funding. (Tricky, eh?)

We're Actually Staying Within Our Budget

by: Lakshmi, IT Accounting Manager

We're an IT group, so we're on a strict budget. We used to budget once a year—what a nightmare. We tried every year to allocate money toward training or conferences, and that money got taken by projects. It was awful.

But now, we don't buy anything in advance for a project unless we're going to need it in the next month. Sure, for servers and big equipment, I need to anticipate and order early, so we actually receive the equipment when we need it, but most things we order only when we need them. So when we have new people starting, I don't buy all the furniture at the beginning of the

year. That money doesn't vanish because the projects ate the money. I buy laptops and phones only when we need them. And, best of all, we have almost no overtime, so my budget predictions are darn close to accurate.

I have a predicted budget for the year—our accounting department wants to see that. But I *manage* the budget week by week, a quarter at a time, and I don't allocate money to projects unless they actually start. The CIO wants to move to monthly budgeting with a monthly portfolio review, and that will be a piece of cake for me. I bet we stick to the budget better, too.

As a senior manager, you can stop the budgeting madness. Use your span of influence to create a rolling-wave budget and portfolio. You can help your managers drive the discipline of managing the portfolio into the project teams.

How often should you iterate on the project portfolio? It depends on your project life cycles, how much change you have in your product planning, and how fixed your budget is. The more risk you have in budget and product planning, the more you want the projects to work in short timeboxes. That way, you can review the portfolio at the end of every timebox.

Review the portfolio as often as you can and not more often. It's not worth reviewing the project portfolio and changing the ranking or commitments if the teams haven't finished enough work. Consider working with other leaders around the organization both to know what to do and to organize your projects so you could release something at least once a quarter. You don't have to actually release, but if your project is in a releasable state, you have the option of moving a project team to another project and satisfying the needs of the project portfolio. Then you'll be able to review the portfolio and know you can make new choices about the work the organization is doing.