

From Millstones to Milestones

How to write plans that win commitment and achieve results

What's the fuss all about?

We have all been there! You know the situation, you have been appointed manager of a new project, you have been allocated a team and you are on your way. Your first task? Well to create a plan of course. So, enthusiastically you bring up Microsoft Project and spend the afternoon keying in detailed tasks, dependencies and resources. You have a plan and you're feeling pretty good about yourself.

A few days later, you present the plan to your team and to your sponsor. All is well. The project must work and you are still feeling good.

Then comes the nightmare. As you make progress on your project, priorities, resources and requirements change. So you feel you must reflect these changes in your plan. However, the reality of this soon means that you are spending more and more of your time keeping your schedule up-to-date. Your team never sees you and your plan never seems to reflect reality. You know this can't be right and soon enough you dump your plan because you just don't have the time to maintain it.

Unfortunately, many task-based plans go this way.

What is wrong with tasks?

Nothing is wrong with tasks; only the emphasis that we put on them. Many project managers today are faced with the requirement to maintain up-to-date, detailed plans showing one person to a task. As tasks get shuffled around and things change, so managers are expected to show this in their plans. This is unreasonable.

Task-based plans also encourage us to monitor progress by collecting actuals against each task and to report the tasks as being a certain percent complete. Not only is this time consuming, it hides the true progress that has been made. Reporting that a task is 50% complete (based on the collection of actuals) tells you very little about what has really been done or when this task is going to deliver anything.

You know as a manager, you barely have time to draw up a plan, let alone spend all day Friday maintaining it.

But we always work out our tasks first, how else can we put a schedule together?

Unfortunately, we are all very task-based in our thinking. Traditional project management theories encourage us to worry about detailed tasks and our scheduling tools do not help. Open the user guide to a product like Microsoft Project and you will read that planning a project involves creating a schedule of tasks, assigning resources and adjusting resources to meet deadlines. There is nothing wrong with this, except there is so much more to planning - much more that you need to think about before you start creating task lists.

So, are you saying that we shouldn't plan?

Certainly not. What we are saying is that planning involves a lot of thought and a one-task-to-one-person list may not be the best solution for you, your team or your project's stakeholders. There are much better ways of communicating the essence of a plan than a list of tasks.

A project plan should be regarded as a contract between the parties involved. These include the sponsor who is paying for the project; the project team; external suppliers and other stakeholders. Reaching consensus on the contract (or the plan) involves a process of negotiating on the following issues:

- what is the project intended to achieve?
- what are the criteria for success?
- what products will be delivered?
- where will the resources come from?
- how will you measure progress?
- how are we going to manage risks?
- who is going to take responsibility for which products?

Any planning activity needs to address these crucial questions. However, project manager's all too often get so hung up on the detail of the plan, that they neglect the real issues and frequently find themselves planning for planning's sake.

There is a way out of this madness. It is called Milestone Planning and it's an approach that we use, teach and advocate.

Working back from the answer

Milestone Planning is a technique that focuses on results rather than tasks.

The technique starts with the definition of the project's final milestone. It then "works back from the answer" to introduce intermediate milestones that define a project's shape. A milestone marks the completion of a product, the achievement of a quality target or the resolution of a technical risk.

All milestones are defined in terms of:

- a completion date
- the products and other outcomes
- the criteria that show that these products are fit for purpose
- the constraints

Products are described at the level of detail and precision appropriate to the project. We like to define products in terms of features, qualities and constraints using a format based on the work of Tom Gilb.

The overall shape of the project is documented as a milestone diagram which shows the milestones and their interdependencies in the concept of the project timeline, but leaves out the tasks.

Having defined the project in terms of milestones, we write a document that captures the essentials of the project and that can be used to negotiate the agreement to proceed. Usually, this document will contain sections on the reasons for this project, what we are going to deliver by when, how we are going to do it, who we are going to use and how we are going to manage risk. This document and the milestones is more useful and more robust than a task plan.

Is this approach really different to what I do now?

Maybe not, we certainly aren't the only people using Milestone Planning in this way. However, in our experience, most managers define milestones very loosely. They see a milestone as the completion of a number of tasks rather than the delivery of a product.

For us, Milestone Planning has changed the way that we work:

Firstly, we keep our focus on the milestone and let individuals worry about the tasks. We only want to update our plan when a task is complete, so 50% or 95% complete is not a measure that we use.

Sometimes, we may even have a milestone that does not have any tasks. In these cases, we are satisfied with the definition of the milestone and we are happy for the person made responsible for the milestone to plan the work. This frees us from the millstone of the scheduler and gives us time to focus on our real work, managing the project.

Secondly, we get a clearer definition of where we are going with the project. Because we start with the final milestone, we agree what we are going to deliver early on in the project and we understand our constraints. We then work backwards, defining tangible, measurable products to act as intermediate milestones. We use the delivery of an intermediate milestone to measure progress.

I should care about this because...?

At the risk of sounding like TV evangelists, we believe that you will find the consequences of this results based approach both refreshing and liberating. You will find that your stakeholders are

better informed, your plans are more flexible in the face of change and your progress monitoring gives you a realistic view of where you are and where you are going.

Scheduling tools such as Microsoft Project and Project Manager Workbench are used in a different way. You start to plan by defining a project in terms of milestones plus associated products, rather than by entering tasks. This allows you to add detail only as and when it is required. Products and product quality take priority over tasks. This is not a licence for quick and dirty solutions! We define quality criteria for each milestone that specify the maintainability and extensibility of a system as much as its ability to meet the current functional requirements.

Project plans focus on commitments to milestones. The plan contains a set of commitments, by the project team and others, to achieve what is required for each milestone. Changing the date or the success criteria for a milestone requires re-negotiating the plan and these changes must be made visible. This is plan that senior managers should see. The project manager, however, is left with the freedom to re-assign or re-order tasks as he or she chooses provided that they do not impact the milestone. The detailed one-person-to-one-task plan is dead!

And finally,

Milestone planning has worked for us. It provides a practical approach to planning that is based on the real world. These techniques can be scaled from the smallest one-person assignment to the most complex projects and are applicable to both IT and Non-IT projects.