PROJECT PAIN RELIEVER
A Just-In-Time Handbook for Anyone Managing Projects

Dave Garrett
1. Problem
In the initial euphoria of being assigned the project management of an important corporate initiative, less experienced project managers nearly always overlook the precise perimeter of that assignment. A clear scope statement is often not established, reviewed, and compared within the timeline and for the budget provided.

Overlooking the preparation of a scope statement is certainly not intentional, but whatever the justification, failing to establish the precise scope remains detrimental to the organization from customer satisfaction, functionality delivery, budget overrun, and schedule delay points of view. The PM does not necessarily collect honors, either.

2. Warning Signs
- The stakeholders, who are the major impacted parties to the project, do not agree on what

Are You Sure You Will Deliver It?
Tino was happy to receive a program management offer from a multinational telecommunications company. To be part of a world-wide program, in his area of double expertise and passion—Telecom and program management—within a ten-minute drive from home was the right next step in his career.

The euphoria he had before starting rapidly subsided on the first day. A debriefing with his new boss revealed that the program was already behind schedule. Tino was expected to drive the implementation team over five continents to roll out an AirPort telecom infrastructure for 100 airport line connections from August to December, equaling 1500 connections by next July. In the past 18 months, only 35 had been done. Now, how did those numbers compare?

There was another challenge that Tino was facing: the detailed technical design was incomplete even though roll-out was underway. How much rework would be generated by this risk, which was almost certain to cause issues? “Hmmm,” Tino thought to himself. “Who will supervise the engineering team? Who will drive these experts to come out with a solution in 2-3 months, when in the last 18 months they could not do it themselves?”

He discovered four months later that the decentralized sales division, which was in charge of selling this solution, was losing commission revenue on...
the project has to achieve or what the major deliverables are.
• No scope statement is yet produced for the project.
• If there is a scope statement, it is not aligned with the needs of the project stakeholders.
• There is no work breakdown structure (WBS) produced during early planning.
• The person footing the bill (the sponsor) does not give clear limits as to what needs to be achieved first or later, and for how much, in writing or orally.
• All targets are flexible; the only common point is that everybody talks in superlatives about the result of the projects once it is finished.

3. What will happen if I do nothing?
If you don’t recognize and address that you are taking on too much because of an unclear or ill-defined scope, then you will see an ever-increasing list of things to be accomplished (scope creep). This will result in dissatisfied stakeholders, who aren’t seeing the results that they expect, and unhappy resource owners who have provided members of your team and see those assignments getting longer and longer. Scope creep will leave you demoralized and feeling that you haven’t been able to achieve what was expected.

4. Solution
Even if not told so you must clarify what needs to be done with the sponsor, customer, and any stakeholders. The earlier you do this, the better. You should proceed methodically, through iterations of meetings and analysis, which slowly build the complete and approved scope:
• Create a narrative description of what will be delivered—the scope statement—to define what the project will and will not deliver.
• Create a WBS to have a visual representation of what needs to be delivered with increasing levels of detail.
• Compare the actual project deliverables with the scope and WBS, and get stakeholder agreement that you have delivered all of the elements (and nothing else).

5. What should I do?
When you realize you took on too much scope, you need to quickly clarify what will be delivered, when, and for what cost. You need to ensure that you reset all stakeholders’
expectations. You need to get all major players (sponsor, customer, team, you) on the same page as quickly as possible.

Your starting point is your sponsor. He or she should be able to provide full details of what is expected of the project, when it must be delivered, and how much has been budgeted for the project’s execution.

5(a) **Apply common sense**

Remember that the problem with common sense is that it isn’t very common! So apply the principle expressed by the following Q&A, often used by trainers when talking about a huge quantity of work (scope) to be covered (delivered): Q: “How to eat an elephant?” A: “Piece by piece.” Apply common sense to break down the work into manageable pieces.

You need to combine your common sense with a solid knowledge of the project deliverables (from your project team) and a solid understanding of project management (which you bring), which allows you to identify the major project elements that can then be expanded into the full work breakdown structure. At this stage, you will include major project elements and perhaps major milestones, but identification of scope will immediately bring clarity to the project and provide something tangible for stakeholders to review and discuss.

5(b) **Not yet started or at an early stage—apply one process**

After detailed consultation with the sponsor or customer, and once you are in agreement, draft an easily understood description of what needs to be delivered in the scope statement. From this, develop the following (in this order):

- Detailed description of what needs to be done, broken out into packages in a top-down manner that gets progressively more detailed (WBS).
- Sequence the lowest level breakdowns of the WBS in a network of activities (network diagram).
- Estimate the time and cost of all necessary activities to determine the schedule and budget—the amount of time and money needed to do the identified work. This may be different from the timeline originally proposed by the sponsor and amount of money set aside for the project.
- Work with the sponsor and customer to refine the plan through various iterations until all aspects are approved.
- Once approved, refocus all your team members on what has been agreed to and manage their execution of the tasks.

5(c) **Advanced stage—apply another process**

If the project is further along, it doesn’t make sense to replan the entire initiative. Instead you want to focus on the work remaining. You can’t change work that’s already been completed, but you can work with the stakeholders to make sure that there is agreement on what elements need to be added to the already completed items in order to complete the project satisfactorily. If some scope creep items have already been completed, that reality has to be accepted, but you can prevent further scope creep from occurring.
You also need to work with the sponsor and customer to understand whether the budget or schedule is more important—are they prepared to spend more money to preserve the delivery date, or would they rather accept a delay in order to avoid a cost overrun. Once that is agreed upon, you need to:

- Repeat the process for developing the WBS and estimates, but focus only on the remaining required scope items
- Revise the existing schedule and budget to reflect the revised deliverables and their costs
- Refine the schedule and budget as necessary to account for the preference of preserving delivery date or cost
- Work with the sponsor and customer until the revised plan is approved
- Once agreed, re-focus all your team members on the revised work and ensure that no one is working on items removed from scope

The essential element in the list is the word focus. Use all other usual PM techniques, such as teambuilding, motivating, tracking against WBS, schedule, and budget (collectively called baselines) to achieve the newly clarified and fixed objectives.

5(d) Assistance—know when you need to ask

Managing scope creep can be a daunting activity, but you don’t have to do it alone. Don’t be afraid to ask for help from your project team and stakeholders, and from other areas of the organization, if available. As the project manager, you need to recognize scope creep and move to stop it, but that doesn’t mean that you have to do it alone.
5.2 Everything has changed. I need to reset goals and expectations.

By J. Chris White

1. Problem

The conditions that were present at the beginning of the project changed so drastically that the project doesn’t make sense anymore. You can’t simply incorporate a few changes and proceed; rather, this is a fundamental shift that requires the entire project to be reset.

2. Warning Signs

Sometimes this problem occurs all of a sudden. There is a dramatic shift that suddenly changes the project entirely. However, this problem can also come about slowly, such as when a large number of changes gradually make it harder to continue with the project until you find that it needs to be reset. Some things to look for include:

- The project champion or sponsor announces a new goal or objective for the project.
- Previous milestones no longer seem logical.
- The skills of the assigned resources no longer fit the work that needs to be done.
- The atmosphere on the team seems frantic and panicky.
- You feel like you are back at square one.

3. What will happen if I do nothing?

If you do nothing, the project will not meet its objectives. Once you recognize that the goals and objectives are no longer aligned with the team’s tasks, you need to address...
the situation. If not aligned, the project will inevitably fail; in addition to being associated with a failed project, you will have to explain why you didn’t act when it became obvious that the project wouldn’t succeed.

4. Solution

While this isn’t technically a new project, for all intents and purposes you need to treat it as such. The changes to the project or its goals are so fundamental that you need to step back and replan the initiative. It is similar to a builder who has to snap the guide line every once in a while to see a straight line that should be followed when constructing a wall. You need to:

1. Understand the circumstances that necessitated a reset, and work with stakeholders to confirm the revised expectations
2. Build the new work breakdown structure (WBS), estimates, resource allocations, and schedule
3. Gain approval and implement changes
4. Manage performance against plan

5. What should I do?

There are a lot of similarities between this solution and the building of your original project plan at the start of the project, but the key difference is the need to ensure that everyone—sponsor, customer, team members, and other stakeholders—understand the need to step back and conduct this reset.

5(a) Fully understand the changes that necessitate this project reset

Understanding what happened and why will provide insights into how to move forward, or at least what to consider. There are two distinct goals:

- Let your stakeholders know that you still have the project under control and that you have a plan to move forward.
- Ensure that you understand from the sponsor and customer exactly what the changes are and the implications that they have. This includes both the tangible changes to the project (scope, budget, timelines) and changes to the expected business benefits (goals and objectives).

5(b) Build the new plan

Before entering into a project reset, make sure that your sponsor and customer understand that you cannot commit to being able to meet their timelines, budget, or scope until you have completed the planning. You understand what they need after completing the work so far, but you don’t yet know if it is feasible. You also need to ensure that your sponsor recognizes that the changes that you are implementing may require additional or different resources, that there may need to be compromise on the constraints (larger budget to meet a more aggressive timeline, for example), and that you need their support to make these changes happen.
The building of the revised plan is similar to the original planning exercise. Use your team to develop the WBS, estimates, resource allocations, etc. You will be able to reuse elements of the original plan, but they will still need to be assessed and validated. Ask yourself: are the estimates, resource allocations, dependencies, and so on, still accurate?

5(c) Gain approval and implement

Once your revised plan is complete, you need to review it with stakeholders to get it approved. Make sure that you highlight:

- The key changes from the original plan in terms of scope, cost, and time.
- Any variations from the requested scope, time, and budget targets. (Be prepared to discuss ways that the targets could be met with additional changes.)
- The resource changes that you need in order to execute the plan, along with the implications if that doesn’t happen when required.

There will inevitably be discussion and negotiation during this process, but once you have stakeholder approval you then need to implement the plan just as if you were starting the execution of any other project.

5(d) Aggressively manage performance against the plan

In theory, performance management should not be different from other types of management, but in reality you need to be even more alert to problems.

- Team members need to adjust to the revised work.
- The pressure of having to replan mid project may have led to planning errors that need to be recognized and addressed.
- Resource changes may have impacted team performance.
- The project may have higher visibility because of the changes.
- The project already has a track record of significant change, so you need to be prepared for more changes in the future.
5.3 We don’t have the resources we need.

By Fran Samaras

1. Problem
You have been assigned a project within your company. You work with the sponsor and find that your team roster is woefully short. Your existing team tackles the WBS, and you simply don’t have enough resources to get the work done.

2. Warning Signs
Maybe more than any other problem, lack of resources needs to be recognized early. The sooner you recognize and accept that there is a resourcing problem, the less severe the issue will be, the easier it will be to fix, and the more time you will have to be successful in implementing your solution. Here are some things to look for:

- Your project team communicates to you that their time has been reallocated by their superiors to other projects or tasks.
- You know up front that your project is missing key resources.
- You thought you had enough resources, but now tasks and milestones are slipping.
- Your company had layoffs and some positions were not backfilled. You are tapping the same people for project work who are already assigned to multiple projects or initiatives.
- Your project team has been working with excessive, unplanned overtime.

3. What will happen if I do nothing?
If you ignore the problem, your remaining project team members will become overwhelmed with extra work or tasks that are not handled. As this problem worsens, critical path tasks will not be completed, and your project will fall so far behind that it is impossible to recover. You have a commitment as the project manager to be transparent about issues affecting your project.

Mountains of Work, But No Resources

Bill is a project manager at a small company. The executives at the company are excited about the possibility of growth, and want to make sure they are positioned for the volumes of new work expected and the resulting increase in a long list of projects that will follow.

Bill was recently assigned to manage three medium-sized projects. He worked with each project sponsor (from different functional areas) and was getting the same resources over and over again being offered to him to staff his projects. He can’t believe what he heard: each sponsor has named virtually the same resources for their respective projects.

Bill called together his project team to begin to create the work breakdown structure for the first project and resource plan. He saw that the project team would be allocated at least 50 percent of their time to work for this project. The next day he had a project meeting for project #2. Many of the same folks were back again for this project.

They successfully identified the tasks and created the work breakdown structure. They were able to assign resources to this project, using the other 50 percent of their available time, but there were gaps.

The following week, Bill was ready to begin the third project planning. Again, most of the same folks were there. They created the work breakdown structure and were ready to assign resources. As Bill expected, no one in the room had capacity. They were assigned a few other roles, but for the most part, they did not have the resources to get the project done. What was he going to do?
4. Solution

There are several potential solutions to this problem. You may be able to secure a transfer of resources from other projects, use temporary staff or outsource some of the work packages, use a different approach to project execution to try and trim down the time taken on each task, remove some functionality from the project, or extend the schedule to give yourself more time. However, you can’t do any of these things on your own. You need to work with your stakeholders and follow a series of steps:

1. Understand the acceptable options and analyze the impact of each
2. Select a strategy, communicate it and replan accordingly
3. Manage the plan

5. What should I do?

It can feel lonely as a project manager, but remember that you aren’t alone. Your stakeholders are there to support you. In this instance, the sponsor and the customer in particular need to be heavily engaged in helping you manage this problem.

5(a) Understand the options.

In some ways, you are lucky to have a resourcing problem because there are many potential solutions that can be implemented:

- Add resources to the team from other projects, organizational areas, or other areas of the company to address the shortfall
- Hire temporary staff—bring in outside contractors to address the need for more resources
- Outsource some of the work; break off some of the project elements and have a vendor complete the work for you
- Use a different approach to the work—agree to take shortcuts and use less formality, effectively accepting increased risk in order to achieve faster progress
- Reduce the scope by eliminating some of the deliverables
- Extend the timeline by delaying the project end date

Of course, these are all fine approaches in theory, but in reality most of these options will be unavailable. You need to work with your major stakeholders, especially the sponsor and customer, to determine which strategies can be used on your project.

If the delivery date is set in stone, then the only options are to increase the budget (add resources in some manner) or reduce scope. Which of those options is more acceptable to the stakeholders? These decisions can’t be acted on in isolation—you will need to gain other stakeholders before you can move resources from other projects or departments, and work through procurement for approved vendors.

Once you have a short list of potential solutions, you should analyze the impact of each of them. The specifics will depend on which options are under consideration, but they may include consideration of these questions:
• What kind of skill sets will help the most, do we have those skills in the organization, and if so can they be made available?
• If skills need to be bought in, how easy are they to obtain, and can we afford them?
• What elements of the project are the easiest to outsource, and is there a vendor who can do the work for us at a price we can afford, and within our time constraints?
• What elements of the scope can be removed with the least impact on other deliverables, and are those acceptable pieces to remove?
• How much more time do we need to deliver the project with our current resources, and can we reduce that delay if we get additional resources?

5(b) Select a strategy

Once you have reviewed the options with your stakeholders, and have considered the advantages and disadvantages of each approach, you should determine a course of action and act decisively to implement it.

Communicate the decision to all of those impacted—stakeholders and team members—and ensure that everyone understands the reasoning behind the decision. Explain the fact that other options were considered before making the final choice. Be prepared for questions, and warn the sponsor to expect questions, also.

Work with your team to replan the project based on the decision made and re-baseline the plan as soon as it is completed. You will need to consider if estimates were recalculated to reflect different resources, any new tasks that have been added, which elements have been removed, and so on. Make sure that you understand the impact of the change on all aspects of your project:

• You need to revisit project risks.
• You may have additional stakeholders (resources, purchasing department, vendors, and so on).
• Your deliverables and success criteria may have changed.
• You may have different constraints.

The possible impacts are plentiful, so use your team to help identify them.

5(c) Manage the plan

You have done a lot of work to get to this stage. Now, you must execute the plan that you have developed. Having completed a lot of analysis, you have come up with a solution that will address the resource shortfall on your project, and you have rebuilt the project plan around that solution. It’s now up to you to ensure that the team can deliver by executing that plan, and while that is theoretically no different from managing any other plan, there are a few things to be aware of:

• Stakeholders will be on edge and likely concerned about minor variance. They have had to compromise the original plan in order to get the project complete, and that’s going to worry them.
• Your team may have lost focus or be demoralized about the changes. They will be learning how to work with new and different team members.
There may be an atmosphere of *it doesn’t matter*—a perception that, because the date was pushed or resources were added before, it will happen again if there are problems.

## 5.4 We’re fine, but over budget.

By Andy Jordan

### 1. Problem

Your project is humming along exactly as you planned. It seems like the perfect project, and so far your work estimates have been spot on. Each week your status reports are showing that you are right on schedule. There’s just one little problem—those same status reports keep showing that you are over budget. In order to stay on schedule, you are spending more money than you had planned, and the situation isn’t improving. You are becoming concerned that the project isn’t going to come in on budget, no matter what you do.

### 2. Warning Signs

You would think that the warning signs for this problem would be easy to spot—you spent more money than you planned for. While that’s true, you should expect some minor variances from your budget—the key is to distinguish between those minor variances and more significant problems with your costs that will impact the overall budget. You should be looking for:

- One or more major unplanned costs
- One or more work areas that are coming in significantly over budget
- A consistent cost overrun on the majority of your tasks (minor expected variances should be approximately equal above and below budget)

Note that although we are talking about terms like cost and budget, the situation isn’t restricted to cash overruns. Some projects don’t track money spent, they track *effort* spent—the number of hours or days of work required to complete the project.
The principles discussed in this chapter will apply equally to all situations, where the effort required is greater than planned—that’s a different type of budget, but just as significant.

3. What will happen if I do nothing?
If you do nothing, the situation will get worse; it’s as simple as that. Even if the project doesn’t become more over budget, the time left to recover is reducing, making it harder to bring the project back on track. Usually, the problem that caused the first cost overrun will also affect future work items and if not addressed the project will become further over budget. That might lead to the project scope being cut, may force the schedule to change in order to try and reduce costs, or in the worst case scenario, may lead to the project being cancelled.

4. Solution
Cost overruns are common, and needn’t be seen as insurmountable problems. However, you need to take a structured approach to the problem that involves understanding why the problem has occurred, how you can recover, and what you may need to change going forward. Also, consider that theoretical cost overruns may occur—a situation where the costs of the work planned exceeds the budget assigned to the project—a sign of future real problems. You need to:

1. Fully understand the cause of the cost overrun and the extent of the impact
2. Take steps to prevent the underlying problem from affecting other tasks on the project
3. Apply strategies that will help the project budget to recover

5. What should I do?
When you are planning your project, you work with your team to assign a budgeted cost (in effort and money terms) to each work area. There are many different ways of estimating those costs, but however you do it, you end up with an overall project budget that is essentially the sum of the costs of all of the work elements. This is a fairly straightforward exercise at a basic level. If your actual cost when executing the project wasn’t what you planned, then either:

- Your planning was inaccurate
- Something happened that changed the reality from what you could reasonably expect

Before you do anything, you need to know which situation occurred, with the implication that you have to manage budget at the work package level in the same way that you manage your schedule. Whether it is dollars or effort, you need to know how much each task should cost, so that you know early on if you have a cost overrun and need to take action.
5(a) **Understand the cause and extent of the problem**

Sometimes things change after we have made our plans. The cost of equipment may suddenly increase, a supplier may have problems that force you to find an alternate supplier, or other such things. Foreseeable problems should have been identified during the risk planning exercises that you conducted with your core team, and you may have a contingency reserve to offset additional costs (but that’s not a free pass for you). On the other hand, a mistake may have been made during planning. For example, you assumed that you would only have to pay $5 per square foot for tiling but in fact it is going to cost $7 per square foot.

Whatever the cause, it should be fairly easy to identify as long as you work with your team members to understand what is happening at the task level, but the harder part is to determine the extent of the problem. Some questions that you need to consider are:

- If equipment costs have suddenly changed, where else in your project do you need similar equipment?
- If a supplier is unavailable, what future tasks are dependent on the same supplier?
- If your estimate was wrong, where else on the project might you have made the same mistake?

When you or a team member first identifies a cost overrun, the numbers may be fairly small. Perhaps the equipment issue has cost the project $1000 more than planned. However, if you have other tasks later in the project that require the same equipment, you may be facing a total overrun of $20,000, and that’s what you need to start managing to now. You can’t wait until those costs have actually been incurred; that is like waiting until a risk becomes real rather than trying to manage it before it happens.

5(b) **Take steps to prevent the problem from getting worse**

Once a cost has been incurred, you can’t *unspend* the money. What you can do is prevent the over-budget problem from getting worse. In our equipment example, you may have time to find an alternate supplier before some of the future equipment needs occur. Alternatively, you may be able to work with your team and stakeholders to agree on a different approach that removes the need for the equipment entirely. Of course, that approach will have its own associated costs, but you are looking to minimize the impact of the overrun, so if the revised approach is cheaper than the more expensive equipment, then it is worth it.

If the problem is due to a mistake during planning, you need to try and find ways to lower the costs to a level closer to your budget. You may be able to find a lower cost resource to complete the work or lower cost materials.

5(c) **Apply strategies to help the project recover**

It is never completely acceptable to be over budget, but sometimes it is more acceptable than other problems. Before you can apply strategies to try to bring the
project back on track, you need to understand where the project cost sits in relation to other project constraints. If we think of the three main constraints of budget, scope, and schedule, one of those has to be the most important, least important, and in the middle.

Your project sponsor can help you understand the priority of those constraints, and where budget sits in that priority list will determine what you are able to do to help the project recover. For example:

- If budget is the most important constraint, you can change the scope and schedule in order to keep the project on budget.
- If budget is least important, you must accept a budget overrun if the alternative is to change the scope or the schedule.
- If budget is the second most important constraint, you can change the third most important constraint to preserve the budget, but you must accept an overrun rather than change the most important constraint.

Any changes to scope or schedule still go through your formal change management processes and must be approved by the stakeholders, but the priority of the constraints can provide you with the authority to make those changes.

It is possible that you may be able to reduce the overall cost by eliminating one piece of work entirely, thereby effectively offsetting a cost overrun by not incurring other costs. Alternatively, you may reduce the resources assigned to the project, or negotiate for a longer delivery date from suppliers. This could extend the completion date, but will lower the costs.

These are dramatic steps, and as the project manager you should be looking for other opportunities to help recover from cost overruns. The advantage that you have with budget is that a cost savings that you make in a totally unrelated area to where the problem occurred will still help; it is not like the schedule where things such as the critical path cloud the issue.

There are many things that the project manager can do to help reduce costs on upcoming tasks:

- Assign less expensive resources to tasks, especially ones that are not on the critical path
- Negotiate discounts from suppliers for prepayment or better payment terms
- Find alternate solutions, suppliers, or parts—perhaps using outsourcing to someone who can do the work more efficiently, or the reverse, which is bringing work in house rather than use higher cost suppliers

You need to ensure that the impact on other aspects of the project are acceptable to the stakeholders—lower cost parts may mean lower quality parts, which in turn may have an impact on the overall quality of your product, for example.

5(d) A note on reserves

When you are doing risk planning, you identify that there may be a budget impact if the risks become real; this is called a contingency reserve. Additionally, there is
recognition that some things may happen that you can’t see coming, and so a fund is put aside for those situations—this is called a management reserve. Collectively, the contingency and management reserves should be between 10 and 25 percent of your total project budget.

In reality, sponsors are very reluctant to formally assign reserves as part of your project budget. That’s okay, but there needs to be recognition that not assigning the reserves does not make the risks any less real. If the reserves aren’t formally assigned to the project, there will likely be cost overruns on the project as a result of risks, and they may not be recoverable without dramatic project changes.

5.5 We’re fine, but short on time.

By Andy Jordan

1. Problem

You have a great understanding of the project deliverables, the team is progressing through their tasks, and there are no major issues. Even the budget seems under control. However, there is a problem with the schedule—everything is taking a little longer than planned and now you are faced with insufficient time to complete the outstanding work before the due date. The date is important on this project, so you can’t simply ask for more time; instead you have to find an alternate solution.

2. Warning Signs

The challenge with this problem is recognizing the warning signs early enough. By the time the more obvious signs are showing themselves, you may have a situation that will be difficult to recover from. You should be looking for:

- Float or slack time (tasks that had plenty of time suddenly being up against deadlines) being used up on early work packages of the project, possibly as a result of resources being moved onto critical path activities (tasks that have to be finished on time or the project will be late).
- Contingency or reserve time being used up at a faster rate than the project is progressing, due to risk events occurring.

What Do You Mean It Won’t Be Done for Two Weeks?

Everything was going well on George’s project. There had been no major issues, the team seemed focused and motivated, and morale was good. Going into the status meeting, George was looking forward to another round of good news. However, just ten minutes into the meeting, George’s world fell apart. The IT team reported that they needed another two weeks to complete their work—and it was on the critical path. Suddenly, George was faced with a two-week delay on a project that could not be late.

He didn’t understand it—the estimates were completed properly, the resources were assigned as they were supposed to be, and the resources seemed to be working well. Yet, the project was behind schedule and George had a meeting later this week with the sponsor and customer. George needed to take steps quickly to stop the delay from getting worse and bring things back on schedule, but what exactly could he do and how should he go about it?
• A drop in confidence from your team when they are providing status updates; they seem less sure that the tasks are going to finish on time than they have been previously.
• Failure to meet scheduled completion dates for tasks, after allowing for any float or slack.

3. What will happen if I do nothing?
Schedule problems don’t cure themselves. They can be caused by any number of reasons, but they all need to be acted upon as early as possible. If you don’t deal with schedule issues when they first appear, not only are they likely to get worse, you will have less time left to resolve them. Falling three days behind with three months to go is a manageable problem, but the same delay with only two weeks left is a lot more difficult to resolve.

Additionally, if you don’t act quickly to address schedule problems, you will be sending a message to your team that the delays don’t matter, and the team will not feel a sense of urgency to correct the situation.

4. Solution
Running short of time is common, but doesn’t have to be the end of the world. There are a number of things that you can do to recover the situation. The key is to make sure that those actions are working together as a unified set of actions, rather than a series of disconnected steps. You need to:

• Fully understand the situation and your options for attempting to recover
• Implement appropriate steps to avoid a schedule overrun
• Understand the reasons for the schedule difficulties and try to prevent them from recurring or getting worse
• Replan the project (or some elements), if necessary

5. What should I do?
When you have a problem with schedule, there are a number of things that you need to do. You need to address the problem that exists now, while at the same time trying to prevent the problem from getting worse, or creating other schedule problems with the actions that you take. At the same time, you need to understand how the problem came about and determine if it’s likely to happen again (and if so, how you can try to prevent it). Before that, though, you need to understand your options.

5(a) Understand your options
Every project has constraints, most typically time, scope, and cost (money and/or resources). If one constraint is falling behind, you can potentially correct the situation by adjusting one or both of the other constraints. However, you need to know how those constraints are prioritized. If you do not already have this information, talk to the project sponsor to discover the priority.
The priority of the constraints will guide you in the steps that you can take. Let’s assume that scope is the most important constraint, followed by time and cost. What this means is that you must do everything possible to avoid changing scope. Once you have done that, you need to ensure that the schedule is met, and then, make sure the budget is achieved. As a project manager, it is acceptable to increase budget in order to preserve the schedule—schedule is more important than budget. However, changes cannot be made to scope to get the schedule back on track because scope is the highest priority constraint. Remember that any change to constraints needs to go through the project’s change management process and be approved by the appropriate stakeholders.

If schedule is the most important constraint, you can potentially change budget and scope in order to get the project back on track. You should start with the lowest priority constraint and then move to the second priority if you are not fully successful by adjusting the priority constraint alone.

If schedule is the third priority constraint, it doesn’t mean that you don’t have to do anything to bring the project back on track with dates. Rather, it means that you have to take steps that will not impact scope or budget.

**5(b) Make the necessary changes**

Regardless of the relative priority of schedule against other constraints, you should look for the most efficient way to bring your project back on schedule. You should not change budget or scope unless you absolutely must do so. That’s difficult because it means that you need to compress the work into a shorter timeframe to bring the project back on schedule without reducing scope. In order to avoid increasing the cost in terms of money and/or resources, you have to look at better utilizing the resources that you already have.

If the project is suffering delays, it is likely that some of your resources are unable to work full time on their tasks. Their work has been planned, but delays elsewhere in the project are preventing them from completing that work. Here are some ways to use resources to get the schedule back on track:

**Fast Tracking**

One way that you can utilize resources is through a process called *fast tracking*. This involves taking two tasks (usually on the critical path) that have a finish to start relationship (task B starts when task A is completed) and overlapping them. An example may be to start the product...
design before the requirements are complete. This isn’t ideal, but if there is enough of the requirements document completed to let you start designing, it can help the schedule.

This approach won’t work for every situation, and it does increase the risk on the project. You are more likely to make mistakes in the design if the requirements aren’t complete. Additionally, it may take more overall effort, including a need to redo some of the design work when the requirements are completed.

However, if the designer would otherwise have been unable to start while they were waiting for the requirements, then fast tracking is worth considering. You just have to make sure that the total duration of the two tasks combined is less than it would have been by leaving the second to start when the first was completed. If you can achieve that goal for tasks on the critical path, you have saved some time on the overall schedule.

**Crashing**

Where fast tracking utilizes resources that you have already assigned to tasks, **crashing** is a technique that involves either reallocating resources from other tasks or adding more resources. As a project manager you need to recognize that crashing may increase the cost of your project if it involves adding resources.

Crashing involves taking work that has been allocated to one person or a small team and adding additional resources to the task. This approach can’t be used for every task; for example, you can’t speed up the time it takes a piece of machinery to produce a part by adding a second machine operator. There is a limit to the benefit, as when a painter needs a week to paint a building and it’s likely that three painters can get the work done in a couple of days, but 100 painters won’t get the work done in half an hour.

Crashing often increases the amount of effort required to complete the work. You can’t generally double the resources and halve the time. There is some loss of efficiency in crashing, but it can generally be used to reduce the duration of a task. If crashing is applied to critical path tasks, it can help to bring your project back on schedule.

If you can crash tasks by reallocating your existing resources from tasks that are not on the critical path, you need not increase the overall project cost. But, if you need to bring additional resources onto the project, you need to formally increase the budget through the change management process.

**Formal project changes**

Work with your core project team to identify a number of ways that the project can be completed more quickly. It may be as simple as fast tracking or crashing a few tasks, or it may require more significant changes. Examples of formal, significant changes include:

- Replanning the project based on a larger number of resources
- Outsourcing part of the project work
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- Reducing the scope of the project to eliminate some of the requirements or defer them to a later release
- Lowering the quality standard and removing some of the work associated with ensuring quality
- Increasing risk tolerance and allowing for riskier work practices

Some of these may not seem like good options, but they should be considered if schedule is considered more important. All of these are formal changes, and you need to follow the project's formal change management process as if the customer had asked for a change.

As the project manager, you should analyze the likely impact on the schedule of making the change, as well as implications elsewhere on the project. The responsibility for approving a specific course of action will lie with the change review board, which should include your sponsor and a customer representative.

5(c) Understanding why the problem has happened and replanning is needed

Once you implement steps to bring the project back on track, there is more work to be done. You need to understand what caused the schedule problem in the first place, and if necessary, take steps to correct the situation. Some problems are genuinely unforeseen events that cause delays, such as a snowstorm that causes flight delays and means that a part is late in arriving. While the impact is real, these don't require detailed analysis as they are unlikely to recur, but these are, by far, the minority.

Much more common are issues with either execution or planning. Execution issues occur when resources are not delivering on the tasks assigned to them. This may be because of lack of focus, conflicting priorities with other initiatives, a failure to recognize the importance of the work, or other reasons. These issues require you to use your management and leadership skills to help the team members who are having difficulties to refocus on the work that they need to complete.

Planning issues come down to incorrect estimates. The work takes longer than expected, for example. In this case, you need to revisit future estimates and see if the same planning mistakes were made for them. Using your core team, you need to analyze the assumptions that you used in creating the estimates, and then compare them with the reality that actually happened. If you need to reconsider future estimates based on what you now know, do so as soon as possible and communicate any new estimates with your stakeholders.

Stakeholders need updated information to make the right decisions about the project, and you need an accurate plan to understand how best to change the project and bring it back on schedule.
5.6 We can get everything done on time and under budget, but not very well.

By J. Chris White

1. Problem
With the purpose of meeting the cost and schedule targets of the project, you have been aggressively managing your team members and it seems to have worked. However, the team has ended up cutting corners and the quality of deliverables has suffered. As a result, the customer is not satisfied that the deliverables meet their standards, and is rejecting some of the work.

2. Warning Signs
Quality failures can be hidden during the process of completion. It is easy to see when a project is over budget or behind schedule, but under quality is tougher to see. There is also a tendency for people to think that the quality will be okay.” Things to look for in quality control include:

- The quality of the work being done by project team members is beginning to decrease.
- Milestones are being approved, even though they are not complete in an effort to keep things moving.
- Everyone seems to be rushing.
- Everyone appears to feel overwhelmed.
- Team members are putting in extra time without charging it to the project.
- A key stakeholder found a poor quality project deliverable in the quality assurance process.

3. What will happen if I do nothing?
Simply put, things will continue to get worse. If you don’t address quality issues as soon as they arise, then you are subconsciously telling your team that quality isn’t as important as cost and schedule.
important, and quality will continue to decrease. When quality problems are discov-
ered, as they inevitably will be, you will have a dissatisfied customer, and potentially
a rejected product. The team could get labeled as not having enough experience or
expertise to get the job done, which can reflect negatively on future career paths. De-
pending on the deliverables of the project, the impact could be far more severe—does
anyone like low quality medicine, cars, or buildings?

4. Solution

Welcome to the world of trade-offs. The do-nothing scenario is to accept losses in
quality or scope to keep within cost and schedule targets. When this option is not ac-
ceptable, there are three choices:

• Make sure you exhaust all options for getting all the original, required work
done within the original time and cost constraints for the project.
• Renegotiate with the end customer or project sponsor to decrease scope or qual-
ity requirements, so that all the newly defined work can adequately be done
within the original time and cost constraints.
• Renegotiate with the end customer or project sponsor to increase the time or
cost constraints, so that the original scope of work can be accomplished at the
desired quality level.

5. What should I do?

Schedule, cost, and scope (i.e., quality) form the Bermuda Triangle of constraints for
any project. Consider the example of a carpenter making a three-legged stool. The first
two legs can be made imperfectly, and the third leg is then just altered to make up for
the imperfections of the other two legs to achieve the “level” balance for the stool. This
metaphor is useful because you can visualize the tension among the three competing
constraints.

5(a) Exhaust all options

The first option focuses on ensuring that you are making the most of the resources
that you have and that they are as effective as possible. For instance, do you have the
right resources on the team? Are other projects stealing your key resources? To get
more information and ideas on this, look at other chapters in this book because they
cover these in more detail. Here are a few good sections of the book to review:

• 4.4: Some team members lack the skills they need.
• 4.5: Other projects keep stealing my resources.
• 4.6: My team isn’t really a team.
• 5.1: We took on too much.
• 5.3: We don’t have the resources we need.
• 7.12: Oops, I forgot a chunk of work that needs to be done.
• 8.4: I may not have the right team.
• 9.6: Costs are much higher than we thought.
5(b) Decrease scope or lower quality

Before making any rash decisions which involve trade-offs between scope and quality, find out if your project is ahead of schedule and/or under budget. You may be able to ease one or both of these constraints a little and still meet your original quality targets. You (or your project sponsor or customer) may be putting unnecessary pressure on the project beyond what it needs. For instance, the project may be one week ahead of schedule. You could let the schedule slip a week and still be on schedule. This little bit of slack time (or budget slack) may be enough to improve quality.

If you reviewed your schedule and cost status to find they are at or behind your targets and the scope or quality is still suffering, then you need to look at decreasing scope or lowering quality in more detail.

If you simply have way too much work to do for the project, not enough schedule/cost to do it, and no flexibility to increase scope or budget, you need to prepare the customer and your project sponsor to either reduce the scope or accept a lower quality deliverable set. Once they know your situation, they may be willing to voluntarily remove some scope or quality requirements to bring those requirements more into line with schedule and cost targets. Just kidding; this rarely happens! Everyone usually wants all original requirements met (and probably some additional requirements, too). If you get lucky and they bite on this suggestion immediately, count your blessings. It’s still worth asking. Just don’t be surprised if they don’t budge. If they don’t initially accept your position, you have just entered into another requirements negotiation phase, much like at the beginning of a project. However, in this case, something has to budge. That’s all there is to it. It’s a matter of what, not if.

At this point, a strong customer relationship really pays off because you will know what is truly important to the customer and can use that as a bargaining chip. For example, you may say, “I know you want both features X and Y. But feature X is the real driver because it is a competitive differentiator for your product. Feature Y is nice to have, but not absolutely necessary on this first release. We can make sure it is the first feature that we add on the next project,” and so on. The key is that the customer and/or project sponsor must be made aware of the situation and the potential final results. The more warning you give them the better; as time progresses, the options for response decrease significantly.

5(c) Increase schedule or budget

The third option is to renegotiate with the end customer or project sponsor to increase the time and/or cost constraints so that the original scope of work can be accomplished at the desired quality level. Implicit in this option is the understanding that neither scope nor quality can suffer. That means that scope and quality are a higher priority than schedule or cost. As in the second option, when you negotiated for scope and quality requirements to be decreased, you will now be negotiating at a higher level and trading off schedule and cost requirements to make way for additional scope and quality. It’s the same concept as the second option, but with the inclusion of requirements from all three elements of the Bermuda Triangle tossed
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in for consideration. As with the second option, something has to budge. It’s just a matter of what.

5(d) No changes

In reality, there is a fourth option: the customer or project sponsor does not renegotiate and instead demands that everything needs to be done as originally planned with the original cost, schedule, and scope goals. If they do not budge on anything (and you’ve exhausted all other options for changing team members, etc.), the last resort is to somehow convince project team members to work extra time that is not documented on the project.

This is probably one of the toughest challenges a project manager can face. You have no way to compensate the resources because they cannot add cost to the project. And, you need them to work additional time to meet the scope and quality requirements without exceeding the calendar targets. Plain and simple, more work has to be done each day. If you have good relationships with the team members, you can probably get away with a little bit of this. They may be willing to give you a little extra time, and, this may be all you need. If you need more extra time, you’ll have to get creative. There are no standard solutions to this problem. Failure may be the only option.

5(e) The project post mortem

Regardless of which option you choose (or is chosen for you), examine why and how the project got into this situation. Perfect projects don’t experience these types of trade-offs. But, no one has the luxury of the perfect project these days. So, look at the conditions that made this current project imperfect. Was it because the original estimates were too low with regard to actual labor hours? Was it because a new technology or approach didn’t pan out the way everyone expected, so rework was needed? Was it because something outside of the project changed and necessitated a new plan (e.g., a change in a specific regulation or product certification)? Did the team simply bite off more than it could chew because it was too optimistic?

When doing this detective work on lessons learned, be brutally honest with yourself and your project team. It is very easy to point the finger somewhere else. If it was a bad estimate to begin with, own up to it and understand the ways in which the estimate was bad, so that it won’t happen again. If members on the project team were not performing at the expected level at the beginning of the project, identify it and let them know about it, so that they won’t do it again on another project. If the learning curve at the beginning of the project was longer than expected, figure out why.

Other chapters in this book deal with how to correct some similar situations (e.g., add buffers to the project to accommodate cost and schedule risks). The point being made here is to do a thorough reflection on the project. If you’re not learning from each project and seeing opportunities for improvement, then you’re fooling yourself.
5.7 My project’s end point is a moving target.

By Cicero Ferreira

1. Problem
When the project began, you knew the deadline. However, time has gone by, and now you feel that the project will never end. There is always a major new demand or change in scope, and the end date is postponed, again. Additionally, estimates always seem to be too low and deadlines are missed.

2. Warning Signs
You would think that this was an easy problem to spot, especially when the deadline moves out. However, there are a number of valid reasons why that might occur. You need to distinguish between a onetime delay and the beginning of a trend that could lead to the project that never ends. Here are some things to look for:

- Multiple delays to the project occur because decisions are not being made promptly or the sponsor/customer continues to change their minds.
- There are a number of scope changes, especially additions to the feature set.
- Your budget or resources keep being reduced and compensated by extending the timeline.
- Estimates are consistently inaccurate on the low side; work always seems to take longer than planned.

3. What will happen if I do nothing?
If you don’t address the issues that are causing the end date of your project to push further out, you are sending a message that you are okay with what’s happening. If you don’t push stakeholders for timely decisions, they will assume that there is no hurry. If you don’t question the constant changes, the assumption will be that you can accommodate them. You can’t take the perspective that there’s nothing we can do about it.

Is This a Project or a Process?

It was a brisk fall morning in New York City and a light rain was falling. Shannon was in her office dreaming about her upcoming vacation in Rio de Janeiro when her manager entered the room. He had just come from a board meeting, and there was a new urgent demand.

They needed to redesign the main process of the manufacturing company they work for, the Order to Cash (O2C) process. The board had defined the following two objectives of reduction: (a) the process cycle time, and (b) the need for working capital.

Now they needed to start this twelve month project as soon as possible. Two weeks later, the project team was working, and Shannon was happy to have been appointed as the project manager. However, at the time, she did not foresee the multiple timeline problems that would arise from the project.

The problems began four months later when Shannon’s company acquired a competitor, who had the best O2C process in the market. That caused Shannon’s team to reschedule their project’s work in order to learn about the new O2C process.

As if that were not enough, in the coming months, there were changes in tax regulations as well in the technologies for process workflow, and business process management. These changes were the causes of a schedule redesign, which led once again to a new work plan.

Eighteen months later, Shannon was again in her office, not so happy now, looking out the window at the Manhattan skyline and contemplated: “My project’s end point seems to be a moving target.”
because it will result in further delays, worsening morale on your team, and ultimately lead to project failure.

If the cause of failure is within your team, either with planning or execution, and you do nothing, your team will question the point of producing estimates if they don’t mean anything. The team will also start to ignore deadlines, which clearly don’t matter.

4. Solution

The solution to this problem will depend upon the cause of the constant delays coming from one of two categories:

- External factors—scope changes, delays in making decisions by stakeholders, resource reassignments, and such
- Internal factors—problems with planning estimates or with the execution of the work by the project team

However, there are a number of similarities to solving both problems. They both require consideration and resolution of:

1. Understanding why the problem is occurring; the root cause of the issue
2. Exploring alternative approaches to solve the problem and recommending a course of action
3. Implementing the solution and monitoring for improvement
4. Recovering from the delay that has already occurred

5. What should I do?

This problem can be a challenge for project managers because the reason for the problem may be beyond your control. You, therefore, need to ensure that whether the problem is external or internal, the people involved understand the impact of the delays and the importance of eliminating and correcting them.

5(a) Determining root cause

The reason for a delay may seem obvious, but you need to look beyond the obvious and understand why the problem is occurring. For example, if delays are occurring because of a failure to make decisions, is it because the stakeholders don’t understand the need for timely approvals, or is it because something has changed and there is doubt about what the decision should be?

For external issues, you need to discuss these reasons with your stakeholders and find out what is going on:

- If we are making lots of scope changes, is it because the original scope is wrong? Do we need to step back and build a new set of requirements rather than subject the project to constant change requests?
- If we keep losing resources, is it because the project is no longer a priority? Is it because an unplanned project has come up that needs to be
addressed? If so, we need to reset expectations and formally replan the project (or potentially put it on hold or cancel it).

- Are decisions slow because the urgency isn’t understood, because the project manager hasn’t communicated when decisions are needed, or is something else going on that makes the decision harder to make? If so, let’s get all stakeholders together and discuss the issues and potential courses of action.

For internal issues, the matter is easier to deal with because there are usually only two reasons why delays consistently occur:

- We planned badly and did not accurately identify how long tasks would take. That may be because we didn’t fully understand the work, or our work breakdown structure was incomplete, and we are now having to complete work that wasn’t on the plan. Maybe we were too optimistic in our planning.
- We are executing poorly against the plan. The plan numbers make sense, but we aren’t meeting the targets because team effectiveness is not where it needs to be. The team is not working together well, or is not committed to the project, but is working on other things that are not formally assigned to them. Maybe they are the wrong resources for what we need.

5(b) Exploring solutions

Once we understand why the problems are occurring, we can do something about it. The first step is to engage with the people who are responsible for your delays and make them part of the process of developing a solution. Any actions that you take to correct the problem will require commitment from them, so it is important to make them a part of developing those actions.

Use inclusive terms in the discussions. For example, say, “How are we going to better control scope?” rather than, “How are you going to reduce the number of change requests?” Always remain focused on the ultimate goal of reducing project delays.

Recognize that there may not be perfect solutions. If the issue is that your project planning was flawed, then the only solutions would be extending the schedule, increasing resources, or reducing scope. This isn’t really a delay, but more an inaccurate delivery date, initially.

Once you identify various courses of action, you need to work with stakeholders to determine the plan that will actually be implemented. This may be simple, if stakeholders commit to make decisions within two days of receiving the request. Or, it may be a more complex solution that involves significant change to the project.

Once the decision has been made, it needs to be communicated to everyone on the team.

5(c) Implementing and monitoring

The agreed upon solution needs to be implemented immediately, which may have a major impact on the project. A major replanning to address faulty estimates may
require progress on the project to slow down or stop until the revised plan is complete. A reconsideration of the project scope and requirements may have the same impact, or at least a refocus onto tasks that the team is sure will remain in scope.

Regardless of the solution, you need to closely monitor how successful it is and act immediately if:

- **A stakeholder misses a deadline for a decision**: Chase them aggressively as soon as the deadline has passed.
- **A change request is received a few days after the revised scope is approved**: Call a stakeholder meeting to discuss the matter.
- **You find that a team member is being pulled off to work on another project after you have confirmed your resource assignments**: Talk to your sponsor and their functional manager to understand why this is occurring.
- **A team member misses the revised date for completing a task**: Talk to them to understand what the problem is and try to address it immediately.

### 5(d) Recovery

Even though you have implemented solutions to address the cause of all project delays, and you are monitoring the success of those solutions, you are not done. This problem started because the project didn’t seem like it was ever going to end, and the deadline was getting pushed further and further out. Now that you have solved the problems that were responsible for the *never ending* project, you need to examine whether you can recover from some or all of those delays.

Depending on the nature of the problems, recovering the delay might not be possible. If your project changed fundamentally as a result of major scope changes, revised estimates, or a different staffing model, you need to rebaseline and establish a new delivery date. But if the delays were caused by bad execution or slow decisions, you may be able to recover at least some of the lost time.

You need to work with your team to identify areas where recovery can occur and then execute plans to achieve that recovery, although, of course, the estimates need to be realistic.
5.8 Part of my project has no end to it.
By Fran Samaras

1. Problem
Your project team is driving to create their deliverables, but you begin to notice that some tasks are repeated again and again. You look at the project plan and you keep adding these same tasks with no end in sight.

2. Warning Signs
This problem requires attention to all aspects of the project. If you only focus on the high-level aspects, you are likely to miss this problem as it gets buried in the details. Look out for:

- Planned tasks that are being repeated over and over
- Production support, customer conversion, or similar tasks being included in the project without defined end dates and status
- Loose ends that don’t seem to be cleaned up near the end of a project
- As project manager, you keep getting tapped to fix or look at problems from your last project
- Your project scope was never really clearly defined, and enhancements or problems keep getting added to your project plan
- One task keeps getting extended while everything else is moving forward as planned
- A resource seems to be spending a lot of time on a fairly straightforward task

3. What will happen if I do nothing?
If you ignore the problem, your remaining project team becomes overwhelmed with extra work that they need to pick up that may not be associated to new work assigned. Critical path tasks may not be completed and your project will not be completed as projected or it may simply be stopped or put on hold. Worse yet, your company may see the project as a failure even though something was implemented, due to your inability to segment ongoing activities.

I thought I Was Helping . . .

Jennifer and Nick are the project manager and business lead on a project, respectively. They have recently been tasked to implement a new system and associated process changes. While they had to narrow down the scope to achieve a date required by their sponsor, they did implement on time and have celebrated their success.

Barbara, in Operations, was excited about the new system, but didn’t know where to turn as she began to have problems from time to time on the system.

Next thing they knew, the occasional one off, here and there, resolutions they were providing did not seem to end. Barbara’s requests were endless. The extra fixes started to get in the way of the other enhancements.

Nick and Jennifer’s “team player” attitudes were waning. There was no end in sight. What did they do wrong?
4. Solution
To deal with this problem successfully, you need to be able to identify the potential problem areas, and then plan and execute strategies to prevent them from becoming a problem, or undo any damage that has already been done:

1. Identify tasks or activities that have the potential to cause you problems.
2. Build comprehensive transition plans into your project with customer sign-offs confirming acceptance.
3. Look for additional items that may be problematic during project execution, and develop additional strategies to address them.
4. Execute a transition plan and formally end the project.

5. What should I do?
To manage this problem successfully, you need to plan for potential problems at the start of the project, and monitor and act on any issues that occur during project execution.

5(a) Identify potential problems
Start by looking at the project scope to ensure that all elements are appropriate for the project. If the scope includes tasks that should be part of another function within the organization—professional services, production support—the scope may need to be modified to remove these tasks. The work can still get done, but it’s not a project task.

Some items won’t show up in the scope and will need to be picked up from the project plan. Look for tasks that are scheduled to be repeated constantly and pay them special attention. Are they actually contributing to a deliverable, or are they really operational tasks that should either be removed from the project or transitioned to an operational team during later phases of project execution?

5(b) Build transition plans
Work that should not be part of the project can’t simply be ignored. It still needs to happen so your project needs to include formal transition and hand over. To be successful you need to:

- Identify the transition tasks
- Identify who they need to transition to
- Build the plan for transition
- Establish the measures/indicators that will confirm that transition has been completed

This may require the involvement of your human resources or organization design staff to help determine how this new work load will affect your organization. In some cases, new departments or responsibilities will need to be formed to deal with...
the new work. Additionally, you will need to identify where, in existing processes, the work would best be integrated, if appropriate.

Once you target an area where the work most appropriately may be handled, engage that group’s leadership as soon as possible. You don’t want to make a recommendation without giving this stakeholder some heads-up.

Work with the operational areas to create procedures and how-to guides for the staff who is taking on this new work. Create new job descriptions, if appropriate. Create production standards or success criteria for the tasks, especially if you have that frame of reference from your project experience and/or documented it in your project plans. Next, outline a transition time frame including job training, if needed.

5(c) Identify additional issues during execution

When you are in the project’s execution phase, there is still the potential for never ending tasks to crop up. At this point, you need to be careful—problem task transition activities can get missed, or they might be legitimate project tasks that are just dragging on and never seem to be completed. If it’s the latter, there are other areas of this book that can assist you. It may be a symptom of one or more of the following issues:

- Inaccurate planning
- The wrong resources assigned to the work
- Unclear requirements

If you identify additional transition requirements, repeat the steps previously mentioned, being conscious of the point where the project stops doing the work and the ongoing operational function takes over. This needs to be an identifiable milestone where there is no confusion over where the responsibility lies.

5(c) Transition

As part of the project closure you need to execute the transition plan that you developed earlier. This will include procedure review, training, customer acceptance testing, and so on, and may involve a number of iterations. It is imperative that you get sign off from the staff or department that is assuming the work, so you can officially close the repeated work off of your project plan.
5.9 The requirements keep changing.
By Elizabeth Harrin

1. Problem
At the start, you thought it was great that people were so enthusiastic about making sure that the project delivered something which was fit for its intended purpose. If that meant a few changes here and there, so be it. Now the changes are piling up, and it looks as if you’ll never get finished, since the goal posts keep moving.

Changes to requirements are common on projects. After all, when you started out, you may have had a clear vision of what needed to be done, but as the project progressed, users started to realize what is possible and asked for more features. Or perhaps the client keeps changing her mind. Whatever the reasons behind requirement changes, you are facing a project suffering from major scope creep.

2. Warning Signs
Don’t get hung up thinking that changes are bad, they aren’t. However, if you are seeing some of the following issues, you are going beyond normal changes and may have a problem:

- People are changing their minds about what they want.
- Requirements that were agreed upon are now different, or removed entirely.
- You are spending a lot of time chasing people for agreement, or just chasing people in general.
- Your plan is out of date as soon as you update it.
- The project is running late because you have to schedule rework to cope with the changing requirements.
- You can’t see the end of the project.

3. What will happen if I do nothing?
The project will drag on if you do nothing, as constant changes to requirements mean nothing is ever completed. Eventually, the project will be cancelled or you will be...
asked to step down. The project will be taken over by someone who will be able to deliver what is needed. Your credibility as a project manager depends on being able to complete projects and ensure they deliver business value, so there is a risk that you’ll end up being seen in the organization as someone who can’t control a project, which is not good for your career.

4. Solution

Changes aren’t necessarily bad; they just need to be handled in a controlled way. You need to stop the scope creep and make sure that everyone signs up to the current list of requirements. You need a way to make sure that if there are changes in the future, everyone understands what the impact is of making those changes. In summary, you need:

1. An agreed set of current requirements
2. A clear understanding among your project team and stakeholders of the impact of making changes
3. A change control process

5. What should I do?

When the requirements keep changing, it is important to nail them down as quickly as possible to get back on track. Establish where you are now, and how you will handle changes when something else changes—because it will!

5(a) Clear set of requirements

Go back to your scope document. What is this project trying to achieve? This forms the underpinning structure of your requirements. List all the requirements you currently have on the project and make sure they all tie back to the project’s objectives.

Ask all your stakeholders to review the list and confirm that it presents the current view of what they want the project to deliver. If there are conflicting requirements, these need to be resolved. Organize individual sessions with each of your stakeholders to understand their point of view and exactly where the points of difference lie. Then, get the relevant people in the same room to discuss the requirements—what’s in and what’s out. If they fail to reach an agreement, you might have to get your sponsor or other outside help to arbitrate and make the final decision.

This exercise will give you a comprehensive view of the project’s requirements. Any changes after this point need to be assessed and taken through the change control process that is detailed later on in this chapter.

5(b) Set expectations

As part of talking to all the project’s stakeholders about their requirements and the definitive list, take the time to explain to them that there is always a cost associated with making a change. If they change their minds in the future and want to add or modify a
requirement, there will be a price to pay. It’s not always a financial price—as a result of the change:

- The project could take longer, or finish earlier.
- More resources could be required.
- The result could be a different quality outcome than what was previously agreed.
- The project could cost more.
- The project may be exposed to a different level of risk.

Changes can be desirable, so stakeholders should know that they have the option to make changes if required. However, they should do so in the full knowledge of what the impact could be, and with guidance from you about how possible it is to make the change. For example, it is easier to accommodate changes early in a project. If you are building a hotel, it is not going to be easy to change the layout of the bedrooms when the decorators are finishing up. Any smaller changes that cannot be accommodated now could be packaged into a Phase 2 or other project in the future.

5(c) Change control process

Now that you have a baseline of project requirements, you need to know what to do, should you be asked to make another change. A change control process establishes how requests are handled for new requirements, or modifications to existing requirements. You may have a formal change management process, or you may choose something less formal. Either way, the steps are the same:

1. A request to make a change to the requirements (scope) baseline is received.
2. The change is assessed against set criteria, typically the impact on:
   - Schedule
   - Resources
   - Other requirements
   - Budget
   - Project risks
   - Objectives and project as a whole, if the change is not done
3. A decision is made whether to implement the change or not (see Figure 5.1):
   - If yes: document the change, update the plans and schedule, and let everyone know.
   - If no: tell the person who requested the change that the work will not be done, and the reasons why.

Make sure that project stakeholders and, in particular, your sponsor, understand and agree to the change control process that you will be using.
Figure 5.1