

Studies prove that most projects, especially large ones, do not end successfully. You might think that companies would be happy to just have their project finish with some degree of success. However, in spite of the odds, organizations also expect projects to be completed faster, cheaper, and with higher quality. The only way that these objectives can be met is through the use of effective project management processes and techniques. Consider the size, complexity, and other characteristics of your project, and build the right project management processes to manage and control your project.

PLANNING

1 Plan the work by utilizing a project definition document.

There is a tendency for IT infrastructure projects to shortchange the planning process, with an emphasis on jumping right in and beginning the work. This is a mistake. The time spent properly planning the project will result in reduced cost and duration and increased quality over the life of the project. The project definition is the primary deliverable from the planning process and describes all aspects of the project at a high level. Once approved by the customer and relevant stakeholders, it becomes the basis for the work to be performed. For example, in planning an Exchange migration, the project definition should include the following:

- **Project overview:** Why is the Exchange migration taking place? What are the business drivers? What are the business benefits?
- **Objectives:** What will be accomplished by the migration? What do you hope to achieve?
- **Scope:** What features of Exchange will be implemented (i.e., e-mail, chat, instant messaging, conferencing)? Which departments will be converted? What is specifically out of scope?
- **Assumptions and risks:** What events are you taking for granted (assumptions), and what events are you concerned about? Will the right hardware and infrastructure be in place? Do you have enough storage and network capacity?
- **Approach:** How will the migration project unfold and proceed?
- **Organization:** Show the significant roles on the project. Identifying the project manager is easy, but who is the sponsor? It might be the CIO for a project like this. Who is on the project team? Are any of the stakeholders represented?
- **Signature page:** Ask the sponsor and key stakeholders to approve this document, signifying that they agree on what is planned.
- **Initial effort, cost, and duration estimates:** These should start as best-guess estimates and then be revised, if necessary, when the workplan is completed.

PROJECT WORKPLAN

2 Create a planning horizon.

After the project definition has been prepared, the workplan can be created. The workplan provides the step-by-step instructions for constructing project deliverables and managing the project. You should use a prior workplan from a similar project as a model, if one exists. If not, build one the old-fashioned way by utilizing a work-breakdown structure and network diagram.

Create a detailed workplan, including assigning resources and estimating the work as far out as you feel comfortable. This is your planning horizon. Past the planning horizon, lay out the project at a higher level, reflecting the increased level of uncertainty. The planning horizon will move forward as the project progresses. High-level activities that were initially vague need to be defined in more detail as their timeframe gets closer.

PROJECT MANAGEMENT PROCEDURES

3 Define project management procedures up front.

The project management procedures outline the resources that will be used to manage the project. This will include sections on how the team will manage issues, scope change, risk, quality, communication, and so on. It is important to be able to manage the project rigorously and proactively and to ensure that the project team and all stakeholders have a common understanding of how the project will be managed. If common procedures have already been established for your organization, utilize them on your project.

4 Manage the workplan and monitor the schedule and budget

Once the project has been planned sufficiently, execution of the work can begin. In theory, since you already have agreement on your project definition and since your workplan and project management procedures are in place, the only challenge is to execute your plans and processes correctly. Of course, no project ever proceeds entirely as it was estimated and planned. The challenge is having the rigor and discipline needed to apply your project management skills correctly and proactively.

- Review the workplan on a regular basis to determine how you are progressing in terms of schedule and budget. If your project is small, this may need to be weekly. For larger projects, the frequency might be every two weeks.
- Identify activities that have been completed during the previous time period and update the workplan to show they are finished. Determine whether there are any other activities that should be completed but have not been. After the workplan has been updated, determine whether the project will be completed within the original effort, cost, and duration. If not, determine the critical path and look for ways to accelerate these activities to get you back on track.
- Monitor the budget. Look at the amount of money your project has actually consumed and determine whether your actual spending is more than originally estimated based on the work that has been completed. If so, be proactive. Either work with the team to determine how the remaining work will be completed to hit your original budget or else raise a risk that you may exceed your allocated budget.

5 Look for warning signs.

Look for signs that the project may be in trouble. These could include the following:

- A small variance in schedule or budget starts to get bigger, especially early in the project. There is a tendency to think you can make it up, but this is a warning. If the tendencies are not corrected quickly, the impact will be unrecoverable.
- You discover that activities you think have already been completed are still being worked on. For example, users whom you think have been migrated to a new platform are still not.
- You need to rely on unscheduled overtime to hit the deadlines, especially early in the project.
- Team morale starts to decline.
- Deliverable quality or service quality starts to deteriorate. For instance, users start to complain that their converted e-mail folders are not working correctly.
- Quality-control steps, testing activities, and project management time starts to be cut back from the original schedule. A big project, such as an Exchange migration, can affect everyone in your organization. Don't cut back on the activities that ensure the work is done correctly.

If these situations occur, raise visibility through risk management, and put together a plan to proactively ensure that the project stays on track. If you cannot successfully manage through the problems, raise an issue.

MANAGING SCOPE

6 Ensure that the sponsor approves scope-change requests.

After the basics of managing the schedule, managing scope is the most important activity required to control a project. Many project failures are not caused by problems with estimating or team skill sets but by the project team working on major and minor deliverables that were not part of the original project definition or business requirements. Even if you have good scope-management procedures in place, there are still two major areas of scope-change management that must be understood to be successful: understanding who the customer is and scope creep.

In general, the project sponsor is the person funding the project. For infrastructure projects like an Exchange migration, the sponsor might be the CIO or CFO. Although there is usually just one sponsor, a big project can have many stakeholders, or people who are impacted by the project. Requests for scope changes will most often come from stakeholders—many of whom may be managers in their own right. One manager might want chat services for his or her area. Another might want an exception to the size limits you have placed on mailboxes. It doesn't matter how important a change is to a stakeholder, they can't make scope-change decisions, and they can't give your team the approval to make the change. In proper scope-change management, the sponsor (or a designate) must give the approval, since they are the only ones who can add funding to cover the changes and know if the project impact is acceptable.

7 Guard against scope creep.

Most project managers know to invoke scope-change management procedures if they are asked to add a major new function or a major new deliverable to their project. However, sometimes the project manager doesn't recognize the small scope changes that get added over time. Scope creep is a term used to define a series of small scope changes that are made to the project without scope-change management procedures being used. With scope creep, a series of small changes—none of which appear to affect the project individually—can accumulate and have a significant overall impact on the project. Many projects fail because of scope creep, and the project manager needs to be diligent in guarding against it.

MANAGING RISK

8 Identify risks up front.

When the planning work is occurring, the project team should identify all known risks. For each risk, they should also determine the probability that the risk event will occur and the potential impact on the project. Those events identified as high-risk should have specific plans put into place to mitigate them so they do not, in fact, occur. Medium risks should be evaluated to see whether they need to be proactively managed. (Low-level risks may be identified as assumptions. That is, there is potential risk involved, but you are "assuming" that the positive outcome is much more probable.) Some risks are inherent in a complex project that affects every person in the company. Other risks may include not having the right level of expertise, unfamiliarity with the technology, and problems integrating smoothly with existing products or equipment.

9 Continue to assess potential risks throughout the project.

Once the project begins, periodically perform an updated risk assessment to determine whether other risks have surfaced that need to be managed.

MANAGING ISSUES

10 Resolve issues as quickly as possible.

Issues are big problems. For instance, in an Exchange migration, the Exchange servers you ordered aren't ready and configured on time. Or perhaps the Windows forest isn't set up correctly and needs to be redesigned. The project manager should manage open issues diligently to ensure that they are being resolved. If there is no urgency to resolve the issue or if the issue has been active for some time, it may not really be an issue. It may be a potential problem (risk), or it may be an action item that needs to be resolved at some later point. Real issues, by their nature, must be resolved with a sense of urgency.

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- Check out all of TechRepublic's [free newsletters](#)
- "[Define project expectations with this criteria acceptance form](#)" (TechRepublic download)
- "[10 steps you should follow to successfully manage your workplan](#)" (TechRepublic download)
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