



TenStep Supplemental Paper

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Five Project Management Mistakes

When is the last time you worked on a project that was planned and executed perfectly? You met your expectations in terms of budget, deadline and product quality. You also had a cordial and professional partnership with your clients. No problems at all.

If you are lucky, you might actually be able to think of a project that might be a candidate - maybe even two. It is easy to forget that many projects actually do complete successfully. Although probably no project is absolutely perfect, there are many projects that get completed with a minimum amount of problems and stress.

Although many projects do end successfully, everyone has also been on projects that were less than successful. Sometimes the project is a 100% outright disaster. However, usually there are shades of gray. It is common to complete a project, but be over your deadline or over your budget. Other times, the client did not get all of the features and functionality they were initially expecting. On some projects there is so much friction between the project team and the client that the project leaves a bad taste in everyone's mouth, even when the deliverables are finally produced.

There are many possible causes of project problems. However, five common mistakes that are at the root of many problems are:

1. Inadequate project definition and planning
2. Weak scope change management
3. Not managing the workplan
4. Poor project communication
5. Lack of quality management

PROJECT MANAGEMENT MISTAKE #1: Inadequate project definition and planning

Have you ever attended an end-of-project meeting on a project that had major problems? If you have, chances are that one of the major themes you will hear is that "we should have spent more time planning." Many project managers think that they need to jump right into the project by gathering business requirements. They think that if they do a good job gathering the business requirements, they are ready to run on the project. That is not true. In fact, there is a definition and planning process that needs to happen before you ever start gathering the business requirements.

Before the project work begins, the project manager must make sure that the work is properly understood and agreed to by the project sponsor and key stakeholders. The project manager works with the sponsor and stakeholders to ensure that there is a common perception of what the project will deliver, when it will be complete, what it will cost, who will do the work, how the work will be done, and what the benefits will be. The larger the project, the more important it is that this information be mapped out



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formally and explicitly. All projects should start with this type of upfront planning to prevent future problems caused by differing viewpoints on the basic terms of the project.

Common project problems

The effects of poor up-front definition and planning cause problems in many areas later in the project. These problems include:

- **Lack of business support.** If you do not define the major characteristics of a project up-front, it is very common to have differences in expectations among the major stakeholders. This is true even if you take all of your initial direction from the sponsor. As a project gets larger, even the sponsor may not have a totally complete picture of what needs to happen for the project to be successful. Other times, the sponsor has a vision, but there are other visions that may be better or more viable. These competing ideas end up surfacing later in the project and causing confusion and rework.
- **Poor estimates.** Usually a project needs to have a budget and deadline before the business requirements are completed. In many cases, if the definition and planning are not done ahead of time, the project team starts off with inadequate resources and time, and you don't realize it until the project is already in progress. Many projects that could be successful are viewed as failures because they overshot their budget and deadline. This situation is often caused by the project manager committing to numbers that are too low, based on a lack of up-front planning.
- **Poor scope control.** One of the major aspects of defining a project is defining the high-level scope. If you do not define and gain agreement on scope, you will find it very difficult to manage scope effectively throughout the project.

How to avoid the mistake

Spending the time on good definition and planning ends up taking much less time and effort than having to correct the problems while the project is underway. It should not be surprising, then, that the best way to avoid this problem is to do a good job of defining and planning the project up-front. This includes:

- **Defining.** Before the actual work of the project begins, make sure you have spent the time to define the project objectives, scope, assumptions, risks, budget, timeline, organization and overall approach. The project manager may think that he or she knows all of this already. However, the purpose of this work is to ensure that there is a consensus between the project manager, project sponsor and all other stakeholders. Even if the project manager and the sponsor are in agreement, there may be other major stakeholders that have other ideas. Differences of opinion between the major stakeholders need to be resolved before the project starts – not while you are in the middle.
- **Planning.** The project manager should create an overall project workplan before the project starts. This is needed to help you estimate the total project effort and duration.



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The project manager also needs to ensure he or she has the detailed work mapped out over the next few months to ensure that the project resources are assigned the right work once the project actually begins.

In addition, it is very helpful to have an agreed upon set of project management procedures that are used to manage the project. These will include how the project manager will manage scope, issues, risks, communication, the workplan, etc. Again, the key is to define these all up-front to better manage expectations. For instance, if you define and get agreement on the procedure for approving scope change requests, you should have a much easier time managing change once the project begins.

What if you are already into the project?

Of course, the best way to solve a problem is to prevent it to begin with. However, what if you do not have that option? Let's say you are into a project, and you start to see some of the problem areas described above. For instance, you start to see stakeholders coming forward with different ideas for what the project should accomplish, but you are already well down the path with the prior vision.

If you are having trouble with one or two aspects of the definition process, you may be able to resolve it with a mini-definition process. For instance, if you find that you cannot control scope because you did not define it to begin with, you can take the time to formally define and gain agreement on the scope. This involves going back to the sponsor and major stakeholders to gain the consensus and approval that you did not get earlier.

If you start to see differing visions as to what the project should achieve, you may need to actually complete the entire definition process while the project is in progress. This is very difficult and painful, but it can be done. You need to take a step back and define objectives, scope, roles, risks, etc. You might need to actually stop work on the project until this definition process is completed, although in many cases this is not practical.

As painful as it is to define the project while it is in progress, it is still a preferable option to ignoring the problem. The first option may end up causing rework, resulting in additional cost and a later delivery date. However, ignoring the problem may end up making the entire solution irrelevant or obsolete as soon as it is delivered.

PROJECT MANAGEMENT MISTAKE #2: Poor scope management practices will have dire consequences on project success

Although many projects do end successfully, all of us have also been on projects that were less than successful. Sometimes the project is a 100% outright disaster. However, usually there are shades of gray. It is common to complete a project, but be over your deadline or over your budget.

Now, let's say you have done a good job defining and planning the project. You're home free, right? Not exactly. After you plan the work, you have to work the plan. You must make sure that the work that you agreed to deliver is completed within the timeframe and budget allocated. However, it is very common that once the project starts, the client ends up asking for more (or different) work than what was originally agreed to. This is the



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time you must invoke scope change management. If you don't, you will end up trying to complete more work than what was originally agreed to and budgeted for. In other words, you are heading down the road to trouble.

Scope management starts with scope definition

Defining scope is perhaps the most important part of the upfront process of defining a project. In fact, if you don't know for sure what you are delivering and what the boundaries of the project are, you have no chance for success. Managing scope is one of the most critical aspects of managing a project. However, if you have not done a good job of defining scope, managing scope will be almost impossible.

The purpose of defining scope is to clearly describe and gain agreement on the logical boundaries of your project. Scope statements are used to define what is within the boundaries of the project and what is outside those boundaries. The more aspects of scope you can identify, the better off your project will be. The following types of information can be helpful.

- The types of deliverables that are in scope and out of scope. (Business Requirements, Current State Assessment)
- The major life-cycle processes that are in scope and out of scope. (analysis, design, testing)
- The types of data that are in scope and out of scope. (financial, sales, employee)
- The data sources (or databases) that are in scope and out of scope. (Billing, General Ledger, Payroll)
- The organizations that are in scope and out of scope. (Human Resources, Manufacturing, vendors)
- The major functionality that is in scope and out of scope. (decision support, data entry, management reporting)

Have a viable scope change process in place

The project manager and project team must realize that there is nothing wrong with scope change. That is, changing scope while a project is underway is not an evil proposition. In fact, in many cases it is a good thing. First, the client typically cannot identify every requirement and feature that will be required for the final solution. Second, even if they did, the business changes over time, and therefore the requirements of the project may change as well.

If you cannot accommodate change, the final solution may be less valuable than it should be, or it may, in fact, be unusable. Therefore, we want the client to have the ability to make changes during the project when needed. The problem comes when the project manager does not proactively manage change on the project. Every project should have a process in place to manage change effectively. The process should include identifying the change, determining the business value of the change, determining the impact on the



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project and then taking the resulting information to the project sponsor for their evaluation. The sponsor can determine if the change should be included. If it is included, then the sponsor should also understand the impact on the project, and allocate the additional budget and time needed to include the change.

Common problems with scope change management

There are a number of common problems that project teams encounter around scope change management.

- **Scope creep.** Many project managers recognize large scope changes, but are not as diligent on smaller changes. There is a tendency to just go ahead and add the additional work without too much thought. Scope creep refers to what happens when a project accepts a large number of small changes. When all of these small changes are combined, the team realizes that they have taken on too much extra work and can no longer make their budget and deadline commitments.
- **No sponsor approval.** Many times, a project manager will receive requests for changes from end users, stakeholders or client managers. Since these are all people in the client organization, there is a tendency to think that they should be accepted. Again, this is a mistake. The end users usually surface scope change requests, but they cannot approve them. Even a client manager cannot approve scope change requests. The only person that can is the sponsor (unless the sponsor has delegated this authority to others). Many projects get in trouble because they think they are getting approval to proceed with scope changes, but discover later that the person that really counts, the sponsor, has not agreed.
- **Project team accountability.** Since the project team members can have a lot of interaction with the client, they are the ones that field scope change requests the most often. Therefore, the entire project team must understand the importance of scope change management. All of them must detect scope changes when they occur and funnel them back to the project manager. If they take on the extra work themselves, there is a good likelihood their activities will be completed late and jeopardize the entire project.

It's never too late to start

If you find that your project is starting to trend over its budget and schedule, try to find the cause. In many cases you will find that you are simply taking on more work than you originally agreed to. The best time to define a scope change management process is before the project begins (as a part of the Project Management Procedures). However, if you do not have a good process in place, it is never too late to start. The project management must call a quick time-out and work with the client on a process for detecting and approving scope change requests. Then everyone must be educated in the new process. If there is a good side of this effort, it is that the team and the client can see first-hand the impact of not controlling scope, since the project is already in trouble. They should be better able to understand the purpose of scope change management and more willing to follow the more rigorous process in the future.



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PROJECT MANAGEMENT MISTAKE #3: Project managers must manage their workplan to be successful

You have to create a good workplan to start with

During the first part of the project, the project manager must spend the time required to define and plan the project. The result of defining a project is the completion of a Project Definition (also called a Project Charter). The result of planning the project is the project workplan. The workplan is a vital tool to ensure that the project manager and project team know what they need to do to complete the project. Different approaches should be taken in this step according to the size of the project. The workplan for small projects can be built without a lot of formality. Larger projects usually build a workplan by using a previous workplan from a similar project or by building a workplan from scratch using a Work Breakdown Structure (WBS) technique. The WBS is a technique for looking at the project at a high level, and then subsequently breaking the work into smaller and smaller pieces until you can get the full picture of the totality of work that needs to be performed.

The warning signs

Many project managers think that the creation of the original project workplan is the end of the effort. There are a couple signs that the workplan is not being updated.

- The project manager cannot tell you exactly what work is remaining to complete the project.
- The project manager is unsure whether they will complete the project on-time and within budget.
- The project manager does not know what the critical path of activities is
- Team members are not sure of what work they need to work on next (or even what they should be working on now).

The general sign that a project is in trouble is that the project manager has a workplan, but does not really understand the progress made to date and how much work is remaining. When this happens, the project team is not utilized efficiently on the most critical activities. Ultimately, the project team gets toward the end of the project and realizes that they have much more work on their plate than anticipated, since earlier scheduled work is not completed. The team may also discover that they have rework to do, since earlier required steps were not completed.

Other common mistakes when managing the workplan

The biggest mistake project managers make is that they do not update the workplan at all once the project starts. However, there are a number of other common problems that occur.

- Infrequent updates. Sometimes the project manager updates the workplan, but at lengthy intervals. For instance, updating the workplan every two months on a six-

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month project. The problem is that by the time you make a formal update, you may have already missed some activities. In addition, if you are behind schedule or overbudget, it takes too long to notice, and you may be too far behind to make up the difference.

- **Managing by percent complete.** All activities should have a due date. If the activity is completed on time, everything is great. If the activity is not completed, a common question to ask is what percentage of the work is completed. Knowing the percent complete is very subjective. The better question to ask is simply “when will the work be done?” This is really the most important information so that you know if your project is in any jeopardy.
- **Assigning activities that are too large.** If you assign a team member an activity that is due by the end of the week, you know if the work is on-track when the week is over. However, if you assign someone an activity that does not need to be completed for four weeks, you have a long time to go before you know if the work is really on schedule. Sure, the person assigned can tell you it is 25% complete or 50% complete. But this is a highly subjective response. The only time you know for sure if you are on schedule is if the work is actually completed in four weeks. That is too much time for uncertainty. In general, if you have a large project, try to keep the work activities to two weeks or less. If the project is smaller, this threshold might be better set at one week. That way, you can find out quickly if anything is running behind schedule.

How do you get back on track?

Hopefully you will never be in a situation where the workplan is out of date and you are not exactly sure where the project stands. If you are, the first thing to do is take a step back and get the workplan back up to date. This includes:

- Accounting for all of the work done to date
- Determining the work that is in-progress and understanding when each of the activities will be completed.
- Working with the team to re-identify all of the work remaining on the project, as well as the estimated effort. In essence, you can take the current workplan as a starting point, but revalidate that all the remaining work is identified to complete the project.
- Reschedule to determine whether you can still meet your commitments for budget and deadline. If you cannot, you need to work with your clients on ways to get the work done within expectations. If that cannot be done, you will need to reset expectation based on the newly revised workplan.

There is never a good way to catch up a workplan once the project is started. Typically, by the time you realize you need to update the workplan, your project is already in trouble. Updating the workplan at that point only shows how much trouble you are in. The much better approach is to update the workplan on a regular basis. Weekly updates are best, but can perhaps be stretched to every two weeks on a large project.



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PROJECT MANAGEMENT MISTAKE #4: Poor project communication will cause many projects to end unsuccessfully

Good communication is a requirement, not a luxury

Many years ago, a good project manager might have gotten away with being a poor communicator. The business clients typically didn't like it, but as long as the project manager could deliver the goods, the client may have been inclined to let them do their own thing. In today's world, however, projects need to be undertaken in partnership with the business, and this partnership absolutely requires solid communication. In fact, many of the problems that surface on a project are actually the results of poor communication. Poor communication can lead to the following trouble areas.

- **Differences in expectations.** Project managers need to strive to ensure that everyone associated with the project has a common set of expectations in terms of what is to be delivered, when and at what cost. The place to initially set these expectations is with the Project Definition document. However, many project managers do not keep key stakeholders up-to-date as expectations get changed. Perhaps it is just as simple as some stakeholders thinking that the project is going to be completed on December 31, when it has been extended until March 31. People make decisions based on the best information they have at the time, and if the project manager does not keep everyone under a common set of expectations, things can start to get out-of-sync fast.
- **People are surprised.** If people are not kept informed as to what is going on, they will be surprised when changes occur. For instance, if you are not going to be able to make your deadline date, you want to make sure people don't read it suddenly in a status report. Proactive communication means that you raise the potential of missing your deadline as soon as it becomes a risk. Then you continue to keep people up-to-date on the status. If you have to declare that you cannot meet your date, people are prepared. People get angry and frustrated when they find out bad news at the last minute, when there is no time left to impact the situation.
- **No one knows what the state of the project is.** On some projects, people are not really sure what the status is. The communication on these projects is short and does not give the reader a real sense as to what is going on. Again, people cannot make the best decisions if they do not have good information. If they are not sure about what is going on, they have to spend extra time following up for further information. In fact, if you send updates to stakeholders and they continually follow-up with you for more information, it can be a sign that your communications are not targeted correctly.
- **People are impacted by the project at the last-minute.** This is a prime cause of problems. In this situation, the project manager does not communicate proactively with other people about things that will impact them. When the communication does occur, it is at the last minute and everything is rush-rush. For example, this happens when the project manager does not tell resource managers that team members are becoming available until the day they are released. Or it could include the project manager that knows for three months that a specialist is needed, but only asks for the



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person the week before. In each case, the other party is surprised by the last minute request and does not have time to adequately prepare.

- **Team members don't know what is expected of them.** In the prior problem situations, communication problems surfaced between the team and outside parties. However, poor communication also occurs within a project team. Some project managers do a poor job of talking with their own team to explain what they are expected to do. Sometimes the project manager is not clear on when assignments are due. Sometimes the project manager has a vision of what a deliverable looks like but does not communicate that to the person assigned until the first attempt comes back wrong. Sometimes the project manager does not communicate clearly and team members spend time on work that is not necessary. Again, all of this causes extra work and extra frustration on the part of the project manager and team members alike.

What's the solution?

Some project managers don't understand how to communicate well and are just poor communicators to begin with. If you think you are in this group, you should look for training or mentoring opportunities to become better skilled. However, in most cases, the problems with communication are not a lack of skills, but a lack of focus. Many project managers set communicating proactively on the bottom of their priority list. When they do communicate, it tends to be short and cryptic, as if they are trying to get by with the minimum effort possible.

The key to communicating is to keep the receiver as the focal point – not the sender. Try to think about what the receiver of the communication needs and the information that will be most helpful to them. If you are creating a status report, put in all the information necessary for the reader to understand the true status of the project, including accomplishments, issues, risks, scope changes, etc. If you are going to need a resource in the future, communicate proactively with the resource manager as early as possible. Then keep reminding them of the need as the time gets closer. For the most part, if you ever surprise someone, it is a sign that you are not communicating effectively. (The only exception is when the project manager is also surprised.) The project manager should also communicate clearly with their team. If you find people are confused about their end-dates or if they are doing work they don't need to do, think about whether you communicated to them effectively.

Many projects have problems. Poor communication can cause many problems and aggravate others. On the other hand, proactive communication can help overcome many other mistakes. Don't consider communication to be a necessary evil. Instead, use it to your advantage to help your project go smoothly with less frustration, less uncertainty and no surprises.

PROJECT MANAGEMENT MISTAKE #5: A lack of quality management will lead to a many quality related problems

Quality is in the mind of the client, not the project manager



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The first thing to understand about quality is that it is not defined by the project manager or project team. Quality is determined by the project sponsor and your client. Sometimes there is a tendency to think that 'quality' means the best material, the best equipment and absolutely zero defects. However, in most cases, the client does not expect, and cannot afford, a perfect solution. If there are just a few bumps in the project, the client can still say that the project delivered to a high level of quality. On the other hand, a flawlessly designed, defect-free solution that does not meet the client's needs is not considered high quality. The purpose of quality management is to first understand the expectations of the client in terms of quality, and then put a proactive plan and process in place to meet or exceed those expectations.

Like the other common project management mistakes we have looked at, problems with quality show up in a number of areas. For instance:

- **Rework.** This is the primary problem caused by poor quality work during a project. Rework means that you have to do the same work twice because the original effort was not satisfactory. Let's look at a software component in a large application. Component walkthroughs or peer reviews are not considered rework, since they are part of building the component the first time. When you say the component is complete, the hope is that no more work is needed. However, if there are subsequent errors when your component is tied into the larger application, rework is required. This is work that is required because the original construction and testing process was not thorough enough and errors still exist in the deliverable.
- **Higher maintenance and support costs.** If errors are caught within the development process, there is a cost associated with rework. However, many times quality problems surface after the project deliverables are completed and in production. This situation just hands the problem off to the support organization. High support costs from a poor quality solution are a sign that the team willingly delivered a less than acceptable solution, or else they did not realize the poor quality because their testing process was also inadequate.
- **Client dissatisfaction.** If a solution is of poor quality, the client will not be happy. Again, some of this unhappiness may be transferred to the support organization. However, if the client has a choice, they may not buy from you again at a later date.
- **Missed deadlines and budget.** In many cases, projects that do not manage quality well end up with a lot of rework, which in turn leads them to miss their deadlines and exceed their budget. This can cause the business value to be delayed, or it may change the value proposition for the entire project.
- **Poor morale.** No one likes to work for an organization that has poor processes or produces poor quality solutions. No one likes to work on projects that are missing their deadlines because of rework. People tend to find excitement and challenge in building a solution. However, their motivation level goes down when they have to continually repair and rework deliverables that don't work correctly. In addition to



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poor morale in general, specific costs can include increased absenteeism, higher turnover and less productivity from the staff.

What can be done?

Quality management is not an event that you consider once in a while. Quality management is an ongoing process that the team needs to focus on throughout the project. When the project begins, the project manager should prepare an overall Quality Plan containing three major components.

1. **Completeness and correctness criteria.** Quality is determined by the client – not the project manager. That might make the project manager uneasy, since he or she may not be sure of the client expectations. That is where completeness and correctness criteria come in. The project team and client then have a common expectation of what is required for each deliverable to be accepted.
2. **Quality control process.** Quality control refers to the ongoing activities that the project team will perform to ensure that the **deliverables** are of high-quality. This can include deliverable walkthroughs, testing of subcomponents, completeness checklists, etc.
3. **Quality assurance process.** These are the activities designed to ensure that the overall **processes** used to create the deliverables are of high quality. These types of activities include third party audits, checklists to ensure that all parts of a process were completed, deliverable approvals, etc.

Everyone on the team needs to have a quality mindset to ensure that work is completed with a minimum amount of errors – the first time. The project manager and team need to understand that the first goal of quality management is to produce deliverables with no errors. The second goal is to catch any errors as early as possible.

From a practical standpoint, if you can build the deliverables with as few errors as possible, and then find those remaining errors as early as possible, your overall project will have much fewer problems. Quality problems tend to show up late in the project – usually during the testing process. However, if you have a good quality process in place, testing should only confirm that everything is working correctly. Then you can work quickly toward final approvals, implementation and a smooth production cycle.