



TenStep Supplemental Paper

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Apply These Ten Techniques to Get Your Project Back on Schedule

People who have worked on project teams know that there is a lot that can go wrong that can result in a project trending over its deadline date. For instance, some of the work may be harder than originally anticipated. You may have turnover on the project that results in having to get new people up-to-speed. Sometimes you discover that activities were simply underestimated.

Regardless of how you get there, many times you will find that you are trending beyond your committed deadline date. If you discover that happening, the first obligation of the project manager is to try to determine the cause. If you look for remedies without knowing the cause, you are susceptible to having the situation re-occur over time.

What should you do after you know the cause? Should you notify the client and push the project end date out further? Not yet. The first obligation of the project manager and project team is to try to make corrections that will get the project back on track again. If you are trending over your deadline at the beginning of a long project, you have many options available to you. If you are toward the end of the project, there may be fewer options available. Look at this list of ten techniques and see which ones can be applied to your situation. Note that this list is not in a priority order. Depending on your project situation some may work in one instance, while others can be applied better in another situation.

(1) Work Overtime

Everyone hates it, but one logical place to look at is overtime. If people work more hours, they can get more work done in the same amount of calendar time. Overtime may be the best option if you are close to the end of the project and just need a final push to get everything done on schedule. If you are toward the end of the project, you also may be able to issue comp time after the project is completed. If you are still early in the project, there are probably other options that are more effective.

There may be cost implications to this option if you need to have contract resources work overtime.

(2) Reallocate Resources onto the Critical Path

The project manager must first understand what activities are on the critical path. After all, if the project is trending over deadline, by definition it is the critical path that is late. Once the critical path is understood, you should see if there are resources that can be moved from other activities to help with the activities on the critical path. This will allow you to get the project back on track by delaying or stretching out some work that is off the critical path. Be careful though - delaying some work may end up changing the critical path. Always make sure you double-check the critical path each time you change the schedule.

(3) Double-Check all Dependencies



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Schedule dependencies represent activities that must be completed in a certain order. For instance, if you are building a house, you cannot start putting up the frame until the foundation is poured and dried. If you are trending over your deadline, these dependencies should be re-validated, since it is possible that the schedule is being lengthened by dependencies between activities that are not valid. Invalid dependencies may make it appear that activities must be performed sequentially when they can really be done in parallel. Sometimes the scheduling software accidentally adds a dependency. Sometimes the project manager adds the dependency, but upon later review decides that the dependency does not really exist. It might make sense to have the team members review the schedule to see if they find dependencies that the project manager thinks are valid, but that they know to be invalid. The dependencies should all be double-checked to make sure you have all your facts correct before you get into more drastic measures to bring the project back on schedule.

(4) Check Time-Constrained Activities

Time constrained activities are those that have durations that do not change based on the number of resources applied. (For instance, you may be allocating team members to a five-day class. The class takes five days if one person attends, and it takes five days if ten people attend.) All of these time-constrained activities should be checked to validate the timeframe. Perhaps there are assumptions being made that could be changed with a different approach. For instance, if you allocated three days for a contract to reach a client, perhaps the length could be reduced to one day by paying more for overnight delivery. If you have a two-day wait for concrete to dry, perhaps the time could be shortened by renting fans to blow air on the concrete.

(5) Swap Resources

As was mentioned earlier, the first thing you want to do when you are trending over your schedule is to try to determine the cause. One cause you may find is that you have one or more resources that are not as productive as you planned. Perhaps it is because they do not have the right skills. Perhaps it is because they are not as productive in this particular area as they are in other areas. Regardless, there may be opportunities to replace resources. In some instances, you can simply swap people who are working on different activities within your project. Other times, it may mean releasing a team member and bringing in another person. Remember that the activities on the critical path are key. You may have options to assign a more productive resource to those activities, while reassigning a less productive resource to non-critical path activities. If the activities off the critical path are delayed, you may still be okay in terms of meeting your overall project deadline.

(6) "Crash" the Schedule

Crashing the schedule means applying additional resources to the critical path. It's always possible to just throw more resources on the critical path, but "crashing" also means you try to get the biggest schedule gain for the least amount of incremental costs. For instance, if one person were assigned to complete an activity in ten days, see if two



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people could complete it earlier. If two resources can complete the activity in five days, there may not be any incremental cost to the project, since you are applying twice the resources for half the time. If two people can complete the work in six days, you will have accelerated the schedule at an incremental cost of two work days (two people for six days versus the original ten day estimate). In this example, you could further crash the schedule by applying three resources. Perhaps now the activity would take four days, or four and a half days. Typically, the more resources you throw on an activity, the more the incremental cost will be and the less incremental time savings you will receive.

The additional resources may come from within the project team, or they may be loaned temporarily from outside the team. One of the goals of crashing the schedule is to minimize the incremental cost. However, in exchange for completing some work ahead of schedule, crashing usually leads to some additional incremental cost to the project. If cost is not as important as the deadline, "crashing" a set of activities can result in accelerating the schedule.

(7) Fast Track

Fast track means that you look at activities that are normally done in sequence and assign them totally or partially in parallel. For instance, in the home building example above, it was noted that the house frame could not be constructed until the foundation was dry. However, if the house is large enough you may have options to fast track by starting to erect the frame on the side of the home where the foundation was poured first. The foundation will harden there first and might allow you to erect the frame on that side, while the foundation on the far side of the home is still drying.

Another example involves designing an IT application. Normally you would not start constructing a solution until the design was completed. However, if you were fast-tracking, you would start constructing the solution in areas where you felt the design was pretty solid without waiting for the entire design to be completed. Fast-tracking usually involves risk that could lead to increased cost and some rework later. For instance, in our example of designing and constructing an application, it's possible that the design might change before it is finalized and those final changes may result in having to redo some of the work already underway.

(8) "Zero Tolerance" Scope Change

Many projects begin to trend over their deadline because they are doing more work than they originally committed to. This could be a result of poor scope change management or it could be that small changes are being worked in under the radar screen. However, if you are at risk of missing your deadline date, the project manager must work with the client and team members to ensure that absolutely no unplanned work is requested or worked on - even if it is just one hour. All energy should go into accelerating the core work that was agreed to.

(9) Improve Processes

When you look at the cause for the project trending over schedule, you may find that some of the internal work processes could be improved. The project manager should



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solicit team member feedback and look for ways that are within your team's internal control to streamline processes. For instance, perhaps you have a daily status meeting that is not providing value and can be scaled back to once per week. You may also find that there are bottlenecks with getting deliverables approved.

If you find that there are delays caused by external processes, try to negotiate changes to the processes going forward - at least on a temporary basis. For example, you may find that activities are being delayed because people need to work on their yearly performance reviews. While the reviews are important, perhaps the timing of completing the reviews can be changed to allow critical project activities to be completed on schedule.

(10) Scope Back the Work

One option that is usually available is to look at the work remaining and negotiate with the client to remove some of it from the project. If the project manager feels like some of the remaining work is not core to the project, you could discuss eliminating it quickly. If the remaining work is all core to the solution, this discussion still might need to take place as a last resort. There may be options to complete this project on-time with less than 100% functionality and then to execute a follow-up project to complete the remaining requirements.

Summary

This paper pointed out ten areas to look at if you are behind schedule. Obviously, one solution is just to deliver the work at a later date. In some cases, that may be perfectly acceptable. However, the assumption here is that the scheduled completion date is very important. Some of these techniques do not require any incremental budget. They should be looked at first. Other techniques to accelerate the schedule will result in increased cost to the project. If the deadline date is more important than costs, the techniques should be applied next. If the deadline date is extremely important and you also cannot change the budget, there may be options associated with scoping back the work. Usually you can complete less work faster. Once you know the cause of the problem, and your budget flexibility, you can determine the best actions to undertake to get you back on track to hit your deadline date.