



## TenStep Supplemental Paper

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### **How to Deal with Uncertainty on Long Projects**

Many times you are asked to manage a project that starts off with a lot of uncertainty. You may not be 100% sure of the resource requirements, the final deliverables, the cost, schedule, etc. You may also be working within a matrixed organization where team members are not allocated full-time to your project. They may be either assigned to other projects, or else to the support of production applications. Part of the planning process involves deciding how to manage the unknowns.

The good news is that project managers deal with the uncertainty associated with large projects all the time, and it is very likely that you can be successful. You can imagine projects with dozens (or hundreds) of workers, and very long timeframes. If those project managers can be successful, you can too.

Okay, so what do you do? Here are a couple suggestions for you to consider, depending on what you think will work best in your situation.

#### **Break the work into smaller pieces**

The first thing to do with a long project is to break it down into smaller pieces if possible. For example, let's say you have a traditional waterfall type of project. Although you are unclear about the work to be done in nine months, you should at least know what you will need to do over the next few months. You are probably going to start in a requirements gathering process. Instead of defining a one year project, start by defining a project that will cover only the analysis phase. After that project, you can redefine and estimate the remainder of the work. If you still feel uncomfortable doing that, then perhaps you can create a project that just covers the design phase. Ultimately, you may complete the work in three or four smaller projects instead of one large one, but you will get there nonetheless. You will also be able to more easily confirm the resources you need for each of the shorter projects.

#### **Provide less detail as the planning horizon gets further out**

Many organizations are not structured in a way that allows you to break a large project into a set of smaller ones. Many companies only want to pay for one project, and track one project. If you break it up into pieces, people get confused about what you are doing.

The next idea is to estimate and plan the work for the entire timeframe, but just understand that there will be less detail the further out in the future you get. Again, you should have a firm and detailed workplan for the next three months, but then the planning will be at a higher and higher level. You have a framework for completing the project, but only the short-term activities are planned out in detail. This is probably the approach most project managers take on long projects.

Of course, you cannot leave everything at the high level. Every month you need to replan the project, validating the detailed work for the next two months, and then building the details for the third month out. This makes sure that you always have a three-month



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detailed planning window, as well as filling in more and more detail for the outer months. If the detailed planning leads you to believe that you will not hit your deadline or your budget, attempt to resolve the workplan situation immediately or raise this possibility as a potential risk.

### **Use multiple estimating techniques**

The classic estimating technique is to build a work breakdown structure, estimate the work associates with the lowest level activities and then add everything back up for the final overall estimate. This approach does not work well when you are not sure exactly what the work is a long way into the future. Fortunately, there are other estimating techniques that will help you crosscheck your estimated effort, cost and duration. First, you can rely on outside experts to review your Project Definition and workplan to see if they think your estimates are reasonable. Second, you can see whether there have been similar projects in your company where you can review the prior workplan and estimates to see how they line up with your project. Third, you can use industry guidelines to create overall estimates based on how much time you think the analysis phase will take. If you find estimating guidelines, for instance, that say that the analysis phase of a project with your characteristic takes 28% of the entire project, then you can provide a high level estimate of the entire project based on your detailed estimate for the analysis phase of your project.

If you are concerned about the availability of resources, this approach should work. When you create the initial workplan, you can start to communicate regarding the specific people you will need in the next three months, and the general types of people you will need further out. If you keep a detailed three-month planning window, you will be able to give the resources managers up to three months lead-time once you finally nail down exactly whom you need. If resources are not available, you also have up to three months to escalate the problem or to look for alternatives. Two to three months notice should be enough time to manage through any of these resource scenarios.

### **Risk management**

Generally, the problem with long projects is that there are many things that can happen in the future that you do not know about today. In other words, there are potential risks in the future. We have already discussed some ways to deal with the uncertainty of schedule and effort estimating risks. There are other risks as well. In your case, for instance, there is a risk that resources you need in the future will not be available when you need them.

All of these risks can be identified, and then a specific plan can be put into place to mitigate the risk and ensure it does not happen. Every month, you would update the risk plan to ensure known risks are being managed and new risks are identified. If you think there is risk associated with any aspect of the project in the future, identify it and mitigate it.

### **Summary**

You are right to be concerned about the unknowns associated with long projects. However, there are a number of techniques that can be used to make you feel more



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comfortable. Being comfortable does not imply that you know everything. Being comfortable means that you have taken your best shot at laying the project out as best you can, and then relying on a good set of communication processes, and good risk and issues management to deal with future threats and current problems as they arise.



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### Turning around a dysfunctional project team

#### **Question:**

*I recently took over a project from a prior manager who was terminated. The project team seems to be doing everything wrong. Their productivity seems to be low and many of them do not get along with each other. We are missing our deadline dates and our customers are unhappy and unsupportive. Every team I have been on in the past has had some problems, but not to this extent. I do not know if the project can be saved or not. How do I even begin to turn this mess around?*

*Daniel Y.*

#### **Answer:**

Daniel,

It sounds like you are going to have a few challenges ahead of you, and the chances of success are not clear. However, your situation can be looked at two ways. One way is to consider yourself on a train that is heading for a certain wreck. If you are thinking of the project this way, then the best actions to take may be to minimize the damage, see what can be salvaged and try to keep from having the company throw too much good money on top of what has already been spent. You might be considered a hero in some circles if you recommend canceling the project.

On the other hand, there are project managers that are known as turnaround artists, and they love to take over projects like yours. In fact, for many of them, the worse shape the project is in, the better they like it. There are people like this at all levels. I'm sure you are aware of CEO's whose expertise is to turn around companies that is in terrible shape.

Based on the information in your question, it is impossible for me to make that judgment call for you, or to know if the first option is even a choice. The project may be such that it must be completed regardless of the cost in terms of dollars and human relationships. Let's assume for now that you will try the later course of action – the project turnaround.

#### **First assess the situation**

The first thing you want to do is assess the current state of the project. This includes the project schedule and the project team dynamics. Your response to the project team problems will first depend on where you are at with the schedule. If you have 30 days of work remaining on the schedule, you will have less ability to make an impact on the team. In this case, the best course of action may be to try to motivate the team for the final push, and watch the schedule like a hawk. On the other hand, if your project has many months to go, then you need to see what can be done to repair the damage on the team as well as replan the schedule to deliver on a new realistic timeframe.

As I mentioned, I would need much more information to help you put together an action plan for beginning a project turnaround. However, any plan is going to include the following items.

#### **Communicate well**

Have you been on a project where the project manager is a poor communicator? This trait usually results in a miserable project experience for everyone. Teams with poor morale tend to have poor communication channels. Don't let rumors and uncertainty fester. Make sure you share as much information as you can about the project status, and anything else that may impact the project team. There is hardly any time when over-communicating is a problem. In your case, it can do nothing but good.

#### **Praise and complement**

When people on your team do a good job, make sure they know it. People don't expect money or gifts when they do a good job – just a pat on the back and a 'well done' by their manager. Give it to them – both informally and formally. Another cause of negative morale is poor or no positive feedback or recognition.



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### **Set clear expectations**

People like to understand what is expected of them so that they know the challenges they need to meet. They want to see the dragon and slay it. Make sure you give clear instructions when you hand out work so that people understand what they are expected to do. When you hand out work assignments, give a deadline date. When a team member is creating a paper deliverable, like a testing plan, give them guidance on how it should be prepared.

### **Don't overcommit your team**

As you try to improve morale, you also need to be careful not to overcommit the team. Determine what exactly is required to finish the project, and remove anything that is extraneous or can be done after implementation. Make sure you manage scope tightly, and try to defer all changes until after the original project is completed. Poor morale can cause your team to miss deadlines, which causes more pressure and degrades morale even further. The opposite is true as well. If the team can start hitting some interim deadlines (and you communicate this fact and praise them), the team morale should improve, which may make it easier to hit your next deadline.

### **Summary**

These are some ideas for turning the project around. First, make sure you understand where you are in the schedule, so you know how much time you have to make significant changes. Also make sure you try to identify as many team problems as you can, as well as the root causes, if possible. Then put together an action plan based on how much work and time is remaining on the project. If there is not a lot of time remaining, focus on the schedule. If a lot of time is remaining focus on repairing the project team, as well as completing the schedule. There are many areas to look at as a part of repairing damage to the project team. Communication, timely performance feedback and clear expectations will be a part of every turnaround plan. Then go out of your way to start building some successes – even interim ones. These general ideas, as well as others that you will identify, will give you a fighting chance to turn things around. Who knows, if you are successful and you enjoy the challenge, you might be known as a turnaround artist within your own organization.



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### Implementing Kaizen – The Art of Continuous Improvement

**Question:**

*We need some help on our quality improvement process. Like all companies, we think that we work fairly efficiently, but we also aren't naive enough to think that there aren't better ways for doing our work. We had a project a few months ago to build awareness for process improvement ideas. We even offered bonuses for people who came up with good ideas that we could implement. At first, we received a number of ideas, some of which we implemented. However, now a few months later, we are not receiving any more ideas.*

*We need to be able to foster an environment where people are always thinking of ways to do their job better. It's not happening for us now. Any suggestions?*

*Al B.*

**Answer:**

Al B,

First of all, we should recognize that certain projects require people to change how they do their job and how they look at their responsibilities. Without those behavioral changes, the project cannot be successful. These types of projects are called culture change initiatives.

You are trying to implement a process improvement initiative. You created a rollout initiative that seems to have a short-term focus around a rollout and awareness building program. It is not surprising, then, that you received only a short-term benefit in terms of process improvement ideas. You did not deploy this initiative with the long-term focus it will take to ingrain process improvement thinking into your company's culture.

What you really want is a long-term change in the way people think about their jobs and their responsibility. You want people to think about process improvements in every aspect of their work process and work environment. The Japanese have a name for this way of thinking called Kaizen.

**Kaizen**

Kaizen comes from two Japanese words. "Kai" means change and "zen" means good. This is not a modern philosophy that only applies to the business world. Kaizen can help improve your business, your relationships, your personal well being, etc. It is a total life philosophy. (For the purposes of this column, though, we will focus on the work aspects of the term.)

The key to Kaizen is that you look to make small, incremental improvements over the long-term. Too many people in most organizations have a job to do and they do it. They don't give much thought to what they do, and they don't consider it their job to think of ways to improve the processes. In fact, many people do a job every day, and are not quite sure why they are doing it, or how their work helps complete an over all business process.

Kaizen requires people to always challenge the basic assumptions about how they do their job, and why they are doing it. If you think of a way to make a significant process improvement in your job, by all means suggest it. Kaizen focuses on the small, minor ideas that might have a small benefit. However, when combined with dozens (or hundreds) of other ideas, these improvements can result in great efficiencies in the process.

There are many, many aspects to Kaizen, including looking for ways to speed up a process, reduce waste, improve quality, reduce the process cost, and increase customer satisfaction. For example, you may have an idea for a simple process change that would save you five minutes out of an eight-hour process. Your idea might be so small you even hesitate to bring it up. The beauty of Kaizen is that your idea is combined with another person's five minutes of savings, and another person's ten minutes of savings. Over time, this may result in sixty minutes of savings on an eight-hour process. Now your talking some real time savings



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overall. Even better, when a process is incrementally changed a number of times, someone else may have an insight into a potentially major idea that can have a more dramatic one-time impact.

### **Implementing Kaizen**

Al, it is not possible to give you a cut-and-dry approach that would be required to implement Kaizen in your organization. Each company is different, since your internal culture is unique. Suffice it to say that the project will require a long-term focus from the company that addresses this from a people, process and technology standpoint.

### **People**

People items include making sure everyone has the right level of training to carry this out. The staff must also have ongoing encouragement from up and down the organization hierarchy. Someone should be the overall sponsor for the initiative and they must provide ongoing vocal support. You also should build reinforcement for Kaizen in your performance review process, your rewards and compensation process and in your job descriptions.

### **Process**

All culture change initiatives must be supported by process changes. For instance, there must be a way to collect and respond to employee ideas. I worked at a company, for instance, that had process improvement submission forms and an Idea Box on every floor. However, the first two times I sent in suggestions for improvement, I never heard anything back. As you might expect, I did not submit any additional ideas through that mechanism in the next ten years. This process obviously did not have a way of tracking who sent in suggestions and validating that the person received some type of response, even if the response was no. Good processes are vital to support culture change initiatives like this.

### **Technology**

Many culture change initiatives have a technology component, but this is probably not one of those. You may need some to create the proper submission forms and to track the submission of an idea, but you don't need a big computer system to make this work in most companies.

### **Summary**

The Japanese have a term called Kaizen that signifies a process where people are consistently looking for way to improve. Typically, these are marginal improvements that add up to major competitive advantage when combined with dozens of other ideas. Implementing Kaizen takes more than training and a bonus plan. It requires a long-term commitment that addresses people and process aspects (and technology if necessary). Only when people start thinking of process improvement as a natural part of their job can the initiative be viewed as a success. If you are not willing to provide this long-term focus, there is really no good reason to even begin this type of effort.