Managing Project Risks When Change is the Norm

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Managing project risks is one of the core skills of project management, and there is plenty of advice available on how to do it, including a book that I co-authored (which happened to win a PMI award for the best piece of project management literature published in 2002).* Most of these risk management approaches operate by proceeding through a process stepwise, first identifying the possible risks, then collecting information about these risks and prioritizing them and finally creating formal action plans to resolve the most serious ones, followed up with ongoing monitoring of these risk resolution plans.

These stepwise processes work best when integrated into the whole project management process so that the risk resolution plans are simply additional tasks in the project: They show up on the Gantt chart as tasks, and they have resources and schedule time allocated to them. The operative word here is *integrated*--integrated into the project planning.

Such integrated processes work fine and are most effective when the project is unlikely to change much during its execution. However, when you expect significant change, a plan-driven approach starts to fall apart, as discussed in my earlier gantthead article. Then the plan--and the risk management plans that are part of it--becomes an undependable guide: We need to find other more reliable guides to lead us through the project.

Intrinsic Risk Management
For the project's risk management, the new guide arises by letting risk management become intrinsic to how you run the project rather than by assuming that risk management will remain well-integrated into project plans that are themselves disintegrating.

Let me back up a bit to explain what I mean by intrinsic. Relative to a project where change is unlikely, in a project where change is the norm you use a new set of tools that are more efficient with turbulence but are relatively costly (when the project is predictable). That is, you shift to a new set of tools and approaches as expected change increases, because these new tools will be more cost-effective in a chaotic environment.

For instance, when you expect technology changes, you move toward more experimentation to monitor and understand existing and new technologies so that you can adapt more quickly and cheaply as technologies shift. Such experimentation is costly though, so you only do it to the extent that it will pay off in a turbulent environment. Similarly, you staff a team differently if you expect great change in the project. You tend to employ more experienced people, keep on-hand skills from other departments that might be needed on short notice, and sometimes assign team members tasks below their skill level so that they are available and up-to-speed if plans change. Such staffing measures are more costly, but they pay off handsomely when change happens.

Now back to intrinsic risk management. In a changing project, lots of experimentation is the way you run the project. That is, experimentation is intrinsic to how you run and view the project because it reduces technical risk. The way you staff the project is done entirely to deal with the project's risks; staffing choices are intrinsic to managing people risks. You use lots of iteration (relatively expensive if you know just where you are headed) because it reduces risk in a changing environment. You keep options open and delay decisions because such a style reduces decision-making risk when chaos reigns, and so on. Everything you do is done with an eye toward reducing risk. In turbulence, project risk management isn't a process so much as a style of operating.

There is still a place for procedural risk management, because the project is still likely to have some risks throughout it that are relatively predictable. For example, maybe you will be working with some flammable chemicals, so you use a traditional stepwise risk management approach that leads you to install fire extinguishers, post the fire department phone number prominently, and practice evacuation drills as risk-resolution plans. But your emphasis shifts much more toward intrinsic risk management.

Unk-Unks
Another subject arises when change is the norm: unknown risks, or unk-unks. These are risks that defy identification until they happen to you. When there is a lot of change and uncertainty in a project, unknown risks are more likely, so we must consider them in a discussion of managing risk in a changing environment.

Until recently, project risk management experts were well aware of unk-unks but didn't know what to do with them. By definition, they fail the first step of a procedural approach because they are not identifiable. But a book published in 2006, *Managing the Unknown* (John Wiley), provides a process for dealing with unk-unks. It isn't quite as easy or simple as we might like, but it is far better than nothing.

Managing the Unknown references a similarly titled book, *Managing the Unexpected* (Jossey-Bass, 2001), which provides a style for dealing with unk-unks. This style is similar to the intrinsic risk management style, and it basically extends the intrinsic style to the extreme for the case when unk-unks dominate the project. Here are two examples of this style:

- A preoccupation with failure, because any deviation from normal might indicate bigger problems ahead.
- Resisting simplification, because simplifications rely on assumptions that might no longer hold in a changing world.

Again, such approaches are relatively expensive and might lead one toward paranoia, so they should only be used in projects where change and the unexpected are the norm rather than the exception. But in such cases, you will find that they are more effective (and ultimately cheaper) than traditional approaches.

* Preston G. Smith and Guy M. Merritt. Proactive Risk Management: Controlling Uncertainty in Product Development. *New York: Productivity Press, 2002.*

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