58. How should I manage adoption of new technologies or processes in my projects?

Depends on:

- ▲ The nature of the project
- ▲ The experience of the team

Analyzing Costs and Benefits

Even when there are compelling reasons to adopt something new, change is never easy. Big project changes increase risk and will probably be resisted by at least some of your contributors and stakeholders, so you will need to manage these changes carefully. A prudent project leader will assess three estimates before committing to a change: the cost of remaining with the status quo, the cost of transition, and the monetary benefits of making the change.

In building the business case for a change to a new process or technology, you first must estimate the consequences of staying with your current methods. You probably have some reasonably good data on existing costs, but you may need to adjust them to reflect any projections or trends that could affect them. Work to understand any significant recent or expected shifts when developing your economic analysis of the status quo.

For both the costs and benefits of a change, your numbers will probably be far less reliable. If the estimates are provided by those in favor of the change, transition costs are likely to be optimistically minimized, and benefits may be inflated. When changes are assessed by people who are opposing them, the reverse is usually the case—costs are huge and benefits seem negligible. Good decision making requires a lot of skepticism, ensuring that the estimates for both costs and value are plausible. For the benefits estimated (which tend to be optimistically too high), it's useful to ask questions such as: "What is that estimate based on?" "What might happen that could decrease the value or effectiveness?" and "Says who?" (Well, maybe not the last one. . . .) If the benefits appear to be overblown, make your own estimates to share with your

stakeholders. In verifying cost estimates for a change, check that they include any project impact that you are aware of as well as all the expenses expected with such changes.

If the overall financial analysis that emerges from your analysis is positive, embrace the change and use the business case to help build support for it. If the overall numbers are shaky, share them with your sponsor and key stakeholders. If the proposed change is not a good idea, use your influence to avoid or modify what is being proposed.

Planning Conservatively

If a major change will be part of your project, plan conservatively. Reassess the skills and knowledge necessary on your team, and be realistic about the aptitudes and interest your team members have in the change. If you need additional or different staffing, begin working with your sponsor to obtain it. In estimating, consider learning curve issues carefully, increasing estimates as necessary to deal with them. If training will be needed by any of your contributors, incorporate the funds required to pay for it in your cost estimates.

Consider all unknowns and risks carefully, and develop contingency and fallback plans to recover if you encounter problems. Also analyze worst-case scenarios, and use your data to build adequate schedule and budget reserve into your plans.

Securing Buy-In

Change is hard. Except for the parties pushing for it, most will resist it at least to some degree. To move forward with a change successfully, you'll need to build support.

If you need buy-in from your management or project sponsor, set up a meeting with them and come equipped with facts and figures. The business case will be central to these discussions, but also consider any other specific benefits of the change that will matter personally to those you report to. If the change will result in a better deliverable, a shorter project, greater efficiency, or anything else that matters to your management, document it. The more you are able to connect the benefits to things your sponsor and key stakeholders care about, the easier it will be to gain their enthusiastic approval.

If you need to get support from your peers and your team, consider

this "what's in it for me?" factor from their perspective. When discussing the change, focus on anything about it that will make each individual's life better or work easier, and on its importance to your shared management. If the new technology or process is a learning experience that might be desirable, stress that. If you have success stories or specific, credible measures from any prototyping or testing that support your case, discuss them. Gaining a meaningful commitment for a successful change will require overcoming the resistance of others using credible information and your best persuasive skills.