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What Causes Bad Estimates …and What You Can Do About It

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Estimates are not created by machines. They are made by people with human foibles. Politics, pressure and optimism all come into play when it comes to estimating.

A study of 258 projects in 20 countries tallied an amazing nine out of 10 with cost overruns. Budget estimates can be off-target by 100 percent or more, according to the _Oxford Review of Economic Policy_.

Two factors are major contributors to inaccurate project estimates. Factor one is insufficient time to deal with uncertainty in the estimating process. Factor two is the need of certain sponsors to create artificially low estimates in order to get a project initiated. Managing expectations and clear communications are a project manager's keys to success.

Acknowledge Uncertainties
Project managers are very good at estimating…when they know about what they are estimating. But as you would expect, estimating when there is a lack of knowledge is problematic.

Time pressure can compromise the quality of estimates. Additionally, gathering estimating information can cost money, because it can involve everything from research and hiring consultants to prototyping.

When there is uncertainty, a logical course of action is to increase the estimate to deal with that uncertainty. Getting leaders to accept a larger estimate to account for uncertainty is where the challenge lies. Unlike project managers, stakeholders often do not look at the entire puzzle — they look for the piece that fits within their constraints. Sometimes they apply pressure to make the estimate fit.

Often leaders prefer to proceed with an optimistic number. From my experience, I have found that it is best to communicate the worst-case estimate first and then work from there.

To manage estimate expectations effectively, take every opportunity to communicate the uncertainty and assumptions associated with the estimate throughout the life cycle of the project. Try not to discuss the estimate without referencing these assumptions.

Stakeholders may acknowledge this uncertainty at the beginning. Once a number is in place and the project starts, they tend to forget the assumptions and uncertainty associated with the original estimate.

It is your job to always keep this information front-of-mind. Assertively communicate when an assumption proves to be invalid or there is a change in a factor that affects the uncertainty associated with an estimate.

Deal with the Pressures to Underestimate

What sells a project and what it costs to create the project deliverable can be two different things.

In my experience sponsors sometimes make the decision that the project is necessary but know it would never be approved by the organization or stakeholders at the project's realistic cost. They then make a calculated decision for a lower project estimate.

Yes, most everyone knows it costs more — but it cannot be sold at that price, so the estimate for the project is essentially a political decision. Once approved, the project becomes difficult to kill because of what has been invested.

Although this can be a common situation, it is always contextually a complex one. Further, it forces the project manager to deal with unrealistic limits that have been placed on your estimates.

I believe in dealing with this kind of situation, it is best to maintain your integrity and gracefully communicate what it really takes to make the project successful, so that decisions are made with the facts available. The decision might still be a political one that may put you and your project in a difficult position, but at least you have communicated all the facts.

Ideally, you would have time to generate the most accurate estimates possible and not be pressured to make the estimate conform to a target number of questionable origin.

In the real world, time pressure and target numbers are a fact of life as evidenced by the Oxford Study that showed nine out of 10 projects with overruns. Equally, if not more important than how you estimate, is managing stakeholders' expectations throughout the project life cycle with regards to that estimate. Managing expectations is the human side of the estimating equation.

> Read more about estimating errors in this month's _PM Network®_ magazine.

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