

12 Tips for Accurate Project Estimating

By Adele Sommers

Projects typically involve many dynamic aspects, yet they're often constrained by finite conditions. These contradictory forces make it very difficult to determine with pinpoint accuracy the time and effort required. By using a set of proactive estimating techniques to scope, plan, and constrain your project conditions, you can dramatically improve your estimating practices, reduce and mitigate risks, and increase your project success rate.



Do you excel at predicting the time, funding, and resources your projects will require?

Whether your company aims to develop a new product or service, update an existing system, or launch a new Web site, these undertakings will require people, schedules, funding, resources, requirements, testing, revising, implementation, evaluation, and many other elements.

You may have seen this phenomenon already: projects are risk magnets. Why is that?

The possible reasons include the fact that projects typically involve many dynamic aspects, yet they're often constrained by finite conditions. These opposing forces make it very challenging to identify with great accuracy the time and effort required, and can result in many budget and schedule "collisions" during the life of the project.

When my clients or colleagues invariably ask, "How long do you think this effort might take?" I usually experience a knee-jerk reaction. Instinctively, a part of my brain that once excelled at solving math problems on timed quizzes goes into overdrive. "I know the answer!" it screams.

Yet, unless that project or task is something I've performed many times before - under very similar conditions each time, and with good records of my actual hours spent - providing an accurate estimate can be quite elusive. As I strive to imagine all of the stages and steps of a process, as well as fathom the unknown variables or things that could go awry, it's no wonder that I hardly ever guess 100% correctly, particularly for new endeavours.

Estimating Techniques Can Help Manage Risks

Did you know that estimating is an invaluable tool for anticipating and managing these project uncertainties?

When we can identify our cost and schedule requirements with relative precision, it reduces the risk of running out of time, resources, and budget during a project.

Yet with all of the emphasis we place on creating accurate estimates and bids, we still seem to have difficulty developing realistic predictions of our time and effort. If we look carefully at the evidence, I believe we'll find three basic, underlying clues to the reasons for our challenges with estimating:

- 1. The presence of hidden or unknown variables that are difficult or impossible to anticipate, and sometimes even more difficult to resolve.
- 2. Our often-idealistic views of our own capabilities. We frequently believe that we can achieve much more than is possible in the available time.
- 3. A strong human desire to please other people by telling them what they want to hear. (After all, who wants to be the bearer of bad news?)

12 Tips for Increasing Estimating Accuracy

To remedy these shortcomings, below are 12 ideas for boosting the accuracy of your estimates:

- 1. Maintain an ongoing "actual hours" database of the recorded time spent on each aspect of your projects. Use the data to help estimate future projects and identify the historically accurate buffer time needed to realistically perform the work.
- 2. Create and use planning documents, such as specifications and project plans.
- 3. Perform a detailed task analysis of the work to be performed.
- 4. Use a "complexity factor" as a multiplier to determine whether a pending project is more or less complex than a previous one.
- 5. Use more than one method to arrive at an estimate, and look for a midpoint among all of them.
- Identify a set of caveats, constraints, and assumptions to accompany your calculations, which would bound the conditions under which your estimates would be meaningful. (Anything that occurs outside of those constraints would be considered out of scope.)
- If the proposed budget or schedule seems inadequate to do the work, propose adjusting upward or downward one or more of the four project scoping criteria: cost, schedule, quality, and features.
- 8. Consider simpler or more efficient ways to organise and perform the work.
- 9. Plan and estimate the project rollout from the very beginning so that the rollout won't become a chaotic scramble at the end. For instance, you could propose using a minimally disruptive approach, such as a pilot programme or a phased implementation.
- 10. In really nebulous situations, consider a phase-based approach, where the first phase focuses primarily on requirements gathering and estimating.
- 11. Develop contingency plans by prioritising the deliverables right from the start into "must-have" and "nice-to-have" categories.
- 12. Refer to your lessons-learned database for "20:20 foresight" on new projects, and incorporate your best practices into future estimates.

In conclusion, by using a set of proactive estimating techniques to scope, plan, and constrain your project conditions, you can dramatically improve your estimating practices, reduce and mitigate risks, and greatly increase your project success rate!

Adele Sommers, Ph.D. is the author of the award-winning "Straight Talk on Boosting Business Performance" programme. She helps people "discover and recover" the profits their businesses may be losing every day through overlooked performance potential. To sign up for more free tips, visit her site at LearnShareProsper.com .

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