Project Forecasting

It's All About Context

By Farid Saddik

Project forecasting: Projection of schedule, cost, and profit in the context of contract, portfolio, resources, needs, and external factors.

We have become a society of over-simplification!

Whether at work, on social media, or at home. We seek the bullet points, summaries, bottom-line, headlines, 140-character discussions (the definition above is Twitter-ready 140 characters!), and dashboards.

So, what does this have to do with project forecasting?

Everything. Project controls in general and project forecasting, in particular, do not lend themselves to being "bottom-lined". Everything that is project controls is about context.

To be clear; summaries, bullets, and dashboards are important formats and tools in conducting business, communicating important metrics, and successfully managing projects. Nonetheless, over-use, misapplication, and abuse are rampant. Ironically, they are important factors in miscommunication and project failure today.

You can't dashboard context (or at least we haven't mastered that yet!)

To demonstrate the point, think of how you ask or respond to the following set of questions (or variants thereof):

1. When will the project be finished?
2. What is the cost projection at completion?
3. What is the projected profit at completion?

If the response to #1 is a date, and to #2 & #3 is an amount, then you have fallen into the trap of over-simplification.

Even when its source is a solid CPM schedule, a project completion date is meaningless without a significant amount of context including assumptions, expectations, conditions, methodologies, project portfolio considerations, and more.

A project completion date, cost at completion and profit are random numbers if presented without at least some basic qualifiers, and they certainly cannot be casually bulletized or dashboarded. When was the last time you saw a project completed per its original baseline and within its original budget? You'll even find that most projects touted to be on-time and/or on-budget carry the context of revised time and revised budgets.

I chose the three questions above in particular because they are typically at the core of why most organizations forecast a project, but they should not, at least not by themselves, and not without proper and sufficient context.

A properly conducted project forecast, in addition to providing answers to the three questions above, should yield the following:

1. The process of the forecast itself should involve the project team, at various levels. The idea is to encourage the project team to closely examine its performance to-date, which usually leads to recognizing:
    a. Incorrect design/bid/budgeting assumptions,
    b. Self-inflicted losses/inefficiencies,
    c. Unidentified Changes/Losses/inefficiencies caused by others. Identifying such issues typically triggers damage recovery efforts, and/or
    d. Difficult circumstances, such as labor shortages or labor skill issue.

2. Similarly, the forecast should challenge the team to analyze the remaining work – in the context of project history to-date. Such process stimulates:
    a. Alternative means of performing the remaining work,
    b. Staffing alignments,
    c. Schedule optimization,
    d. Schedule-based cost projection, and
    e. Proactive issue identification and avoidance,

3. While most organizations have some mechanism in place to monitor cash flow at a macro level, the forecast is a great vehicle to identify project line-item under/over billings, detail its cause(s) and remedies.

4. Flush out project record-keeping deficiencies. Quantities and equipment tracking are found to improve significantly when utilization of the data is imminent.

5. As more forecasts are conducted for the same project, trending can provide a perspective on the forecast stability, or lack thereof, the reason(s), and possible remedies. The result will be improved projection accuracy.

Whether we undertake a forecast ourselves on behalf of a client, or train an organization to conduct its own forecasting, we generally advise that, in addition to the direct project team, at least a senior-level individual, who is not directly involved with the day-to-day forecasted project activities, should be involved in the forecast. The intent is not to “audit”, but to be someone who is not emotionally invested and can provide a fresh corporate, and portfolio-driven perspective. If your organization has some project controls structure, then at least a senior project controls individual should be involved.

What to do

For most medium to large size projects, a quarterly proper forecast is high advised. Depending on your job costing system, and depending on your forecasting tools, the resources needed to prepare for, and conduct a forecast will vary greatly. The first “baseline” forecast should be conducted before the project progress is at 5-10%, but after the project team has been “immersed” in the project. Some argue that such would not be very different from the project budget, which is a misperception.

The forecast is not complete without a narrative report which among other things, details assumptions, project and corporate commitments, risks, and opportunities that result in the projected cost and revenue.

The take-away

If you are responsible for project schedule or cost projection, make sure to incorporate sufficient context that is commensurate with the degree of projection accuracy required. Such context will be the basis for clear communication of all the parameters affecting project completion and profitability metrics, which is exactly what a successful project portfolio executive would need.