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Why the 'Achievable' project forecast is as important as the Prudent 'Estimate At Completion'

When it comes to forecasting the final outcome of a project in terms of cost and profit result, two different forecasts need to be established: a prudent 'Estimate at Completion' used for short term accounting reporting, as well as an 'Achievable/ Likely' forecast derived from a sensitivity analysis, that is used to anticipate the organization's longer term financial performance. Both are equally important to the project-driven organization and should call for the same level of attention from the Project Manager. In this White Paper we investigate why they are both important and how they should be derived and considered.

For good reasons, Project Managers tend to concentrate on the Estimate at Completion (EAC, also sometimes called 'Forecast') of the cost performance and not focus enough on the 'Achievable/ Likely' of the sensitivity report. Let us explore this issue in detail.

'Estimate at Completion' versus 'Achievable/ Likely'

The EAC is a prudent estimate of the project outcome. It contains a significant element of contingency (which has been calculated using a specific process that can involve advanced statistical methods). It is also often conservative because it recognizes costs immediately but revenue only when a Change Order has been formally signed by the Client. Hence the EAC is supposed to be a relatively pessimistic – or prudent - view of project outcome; some organizations describe it as something like a P80 (only 20% chances to be worse).

The EAC project profit value shall always be smaller (more prudent) than the 'Achievable' profit value

The 'Achievable'/ 'Likely' forecast, contained in a sensitivity table, on the other hand, reflects what the project believes it can achieve. It reflects a reasonable amount of additional revenue from unsigned Change Orders and the P50 (achievable) contribution from the contingency calculation. It also reflects risks and opportunities that have not yet materialized but that the project manager reasonably believes will happen.
The EAC is used for accounting and reporting purposes at the level of a single project.
At the company financial level which aggregates several projects, the 'Achievable' value or some part thereof is considered for the company financial forecast (along the logic that there is a low probability that all projects in the portfolio will show poor results simultaneously; and that the average result across a portfolio should be around the sum of the achievable of each project[1]). Hence, the 'Achievable' performance is a key indicator for financial personnel that is used ultimately to establish the market expectations. Its importance should not be underestimated by the project team.

[1] *This logic potentially has some flaws in particular when there are only a limited number of projects under one entity, or if there is a potential common cause of failure or of opportunity across the project portfolio.*

Unsigned Change Orders

In particular when Change Orders are on the table but have not yet been signed by the Client/ Owner, it is essential to remember that:

- Cost that is unavoidable should be immediately reflected in the EAC
- Corresponding revenue cannot be recognized in the EAC and should be immediately recognized in the 'Achievable'/ 'Likely' forecast.

This is why all new information regarding cost or revenue should be reflected either in the EAC or in the 'Achievable' according to the type of cost or revenue it concerns. Cost Controllers and Project Managers must spend adequate time establishing the variance and the quality of the 'Achievable' result.

What Should a Sensitivity Table Contain?

While the 'Estimate at Completion' table is a natural table in most organizations' periodic project reports, the 'Sensitivity' table (also sometimes called 'risk and opportunities table') is less common because it is a bit more difficult to understand. Still it is major piece of project reporting and should trigger useful discussions. If your organization does not have a sensitivity table in your periodic project reports, this is a gap you need to fill-in immediately.
The Sensitivity table gives, in the opinion of the Project Manager, what are the 'Worst', 'Achievable' and 'Best' values for each of the main budget categories, and for the project in general.
Often, these values are defined as follows:

- 'Best' is P90 (there are only 10% chances to be better)
- 'Worst' is P10 (there are only 10% chances to be worst)
- 'Achievable/ Likely' is P50 (there are 50% chances to better or worst).

This will give senior management a bracket on the project's expected final result. This bracket can sometimes be quite wide, should narrow as the project progresses, and needs to be managed properly.

There is a fundamental difference between the EAC and the 'Achievable' values. As explained in the following sections, both are important for different reasons. At this stage we just want to state a very important health check rule. The EAC is deemed to be a prudent view on the project completion. Hence, the EAC project profit value shall always be smaller than the 'Achievable' profit value.

The 'Achievable' value of the sensitivity table is as important to the organization as the EAC of the project cost performance!

Why the 'Achievable' project profit will evolve in a much smoother manner compared to the EAC during project execution

When the 'Achievable/ Likely' project performance is adequately and carefully reported, it will give a view of the project performance that will be much less susceptible to ups and downs than the formal, prudent, Estimate at Completion. This is particularly obvious when both project performance measures are trended over the duration of project execution.
The reason is that the EAC must:

- Not recognize any revenue that is not formally signed-off by the client but must recognize the cost (and often Change Orders are signed late in the project),
- Include a significant prudent contingency element that in most cases should not materialize,
- Be generally prudent/ pessimistic about costs unless demonstrated otherwise.

Accounting rules make it unavoidable that the EAC will suffer great changes, such as at the end of risky phases of the project (contingency release) or upon signature of Change Orders, while the 'Achievable/ Likely' forecast will not see them: reasonable Change Order revenue will have been included since its identification, and the level of contingency included will be much minimal.

Conclusion: focus your attention on the 'Achievable/ Likely' Forecast as well!

Project Managers should thus focus their attention as much on the Estimate at Completion (EAC) as on the 'Achievable' or 'Likely' forecast, because of the implications for the organization. It is also a way to go beyond the necessarily prudent (accounting-driven) EAC to really understand the potential of the project. Beyond observation of the EAC, management should also challenge Project Managers on their 'Achievable' forecast with the view to optimize the project contribution to the organization. In addition, the 'Achievable'/ 'Likely' forecast will be much less susceptible to the usual squirrel effect created by experienced Project Managers stowing away reserves at the beginning of the project thus degrading temporarily the EAC project performance!