

Defining an Effective Time-Based Progress Metric

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In almost any endeavor we will, at some point, be asked to describe our progress. Whether the question is simply “How are you coming on the design specs?” or as complex as “Where do we stand on a cost basis on the piling installation contract?” we need to be able to respond quickly, accurately and completely. Our ability to convey a credible answer depends on the tool we use to measure progress.

This article describes the characteristics of a time-based progress metric, providing ideas for project managers looking for new and effective ways of presenting progress information to their teams and project stakeholders. It also provides senior managers, executives, and project sponsors with a useful guide for asking, and evaluating the answer to, the question of “How are we doing?”

With a wide range of options available, we select our progress measuring tools based on the question that we are answering. A simple “How are you coming?” question allows you to use the “Awful – Fine – Great” meter; our response is, almost always, “Fine!” The scaling of this meter is not terribly refined and requires careful interpretation by the receiver: How close to “Awful” can you be and still be “Fine”? How close to “Awful” are we? If we are “Great” does that mean that we are done or that we are simply on-track? Our reliance on the A-F-G meter depends in large part on the credibility of the person giving the response.

As a project manager, you need to anticipate the questions and develop the data needed to support your answer. Standard project management tools, like schedules, budgets and specifications, give us information about what we are to accomplish and provide a basis for recording what we have completed to date. They fall short, however, when it comes to describing where we are versus where we need to be. Other tools, such as earned value analysis, can be used to ensure a consistent evaluation, increasing the reliability of the resulting assessment. Depending on the level of detail incorporated into the measurement, they may also identify areas requiring extra management attention.

What is an Effective Progress Metric?

A progress metric should not simply provide a record of time passed or resources consumed; it should provide information useful in assessing the likelihood of project success. To be effective, project metrics must:

- Be timely, available when and where project decisions need to be made
- Accurately represent the current state of the project
- Be relevant, concise, and focused on the decision to be made
- Identify the specific project objectives that are affected
- Be neutral and unbiased toward any group or outcome
- Document any assumptions made in the analysis

- Be based on approved project processes, with any deviations clearly identified
- Be consistent with all other approved project data
- Be accepted as accurate by those responsible for executing the project
- Be presented in a format that aids decision-makers in applying the data

The Seven Key Characteristics of An Effective Progress Metric

Given the wide range of metrics available, we need to narrow the field by defining a progress metric as *the presentation of data that measures progress toward a stated goal over time, compared to a planned rate of progress*. A metric can be either quantitative or qualitative.

Whether our metric is based on a detailed calculation of costs or a series of qualitative assessments, all share seven key elements:

- A clear vision of success for the task or project shared by all project participants and stakeholders
- A defined purpose for the metric describing what we are measuring, what we are trying to control and who will benefit from having the information
- The path to successful project completion based on the process that each task will follow to completion
- The starting point for assessment, taking into account all predecessor tasks and the quality of their output
- Actual progress versus plan consistently measured at regular intervals across the course of the project
- An adequate tolerance for measurement error that separates true deviations from plan from expected random variation
- A level of detail appropriate to the scale of the task or project and the potential consequences of error

Conclusion

By anticipating and understanding the questions that will be asked, we can create effective progress metrics that improve the likelihood of project success. By considering the seven key characteristics of an effective progress metric, you can avoid amassing great quantities of data simply because it is available and focus only on the measures of true project success.

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