

Defining an Effective Program Metric



*"... building professionalism
in project management ..."*

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Agenda

- Objective
- Definition
- Key Elements of a Time-Based, Program Metric
 - Vision of Success
 - Purpose
 - Path to Completion
 - Starting Point
 - Actual vs. Plan Comparison
 - Range of Allowable Values
 - Appropriate Level of Detail
- What is an Effective Metric?
- Conclusion
- References
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Objective

- We will identify the basic characteristics of a time-based progress metric, and show how each contributes to the effectiveness of the measuring tool.
- We will provide a useful guide for new Project Managers who may discover new ways to summarize and present project or program information to their management teams.
- Will refresh experienced Project Managers to help them avoid amassing great quantities of data that do not truly help us accurately, effectively, and efficiently portray our progress towards success.

Progress Metric Definition



- Any presentation of data (usually “written” or “publishable”, including, of course, electronic media) that measures and/or assesses progress towards a stated goal, where the measurement or assessment is made regularly and periodically, and compared to an anticipated rate of progress that was defined during the planning phase of the task or program.

Key Elements of a Time-Based, Progress Metric

- Definition (Vision) of Success
- Purpose
- Path to Completion
- Starting Point
- Actual vs. Plan Comparison
- Range of Allowable Values
- Appropriate Level of Detail

Definition (Vision) of Success

- If we are trying to measure our progress towards a goal, we must be able to articulate that goal.

Establish Project Objectives

Specific – Be specific in targeting an objective

Measurable – Establish a measurable indicator (s) of progress

Assignable – Make the objective assignable to one person for completion

Realistic – State what can realistically be done with available resources.

Time – related – State when the objective can be achieved; that is, duration

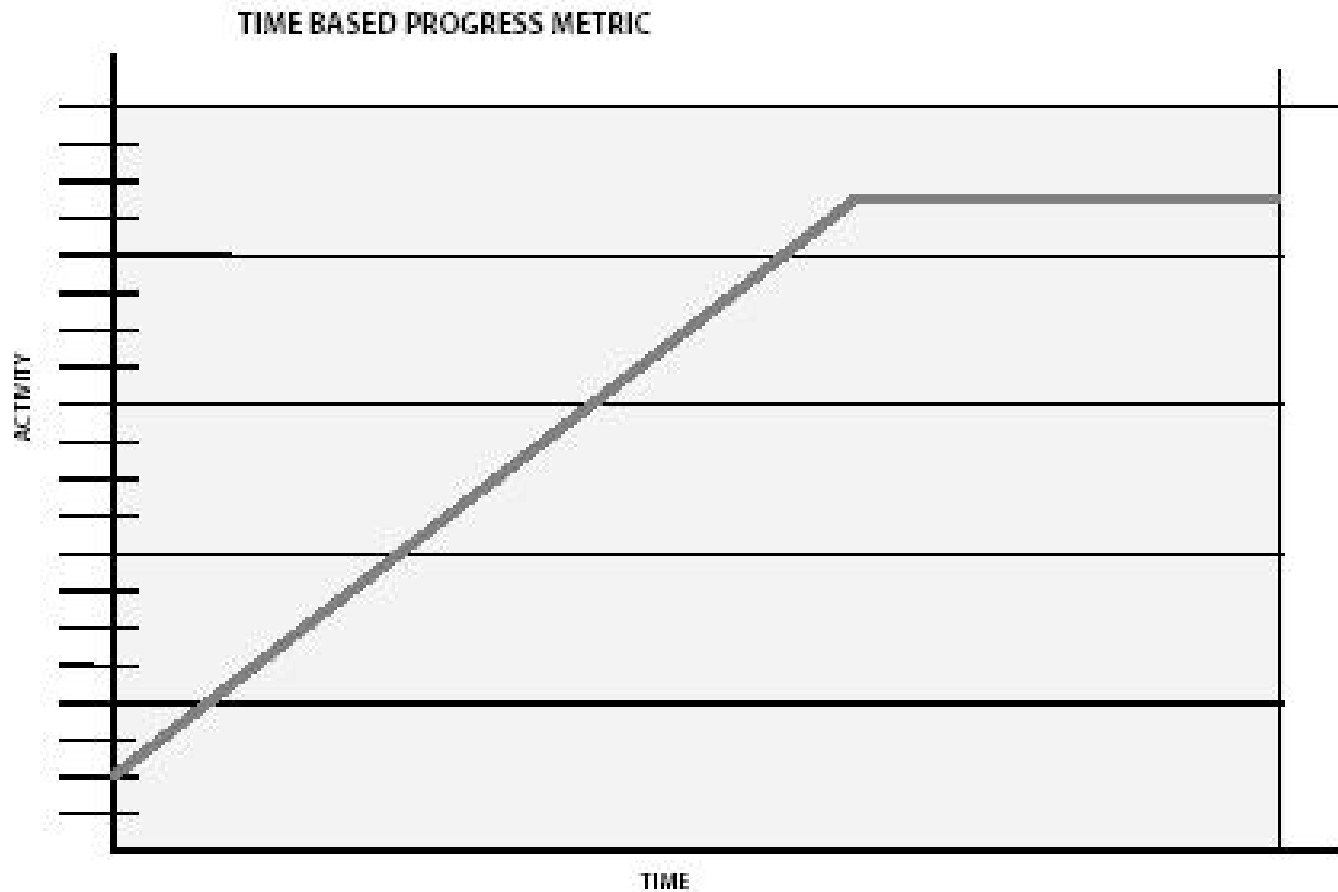
Purpose

- We need to know:
 - What we are trying to measure?
 - What we are trying to control?
 - Who will benefit from having the information about our progress?
- Describe the management function that will be served by the information contained in the metric.

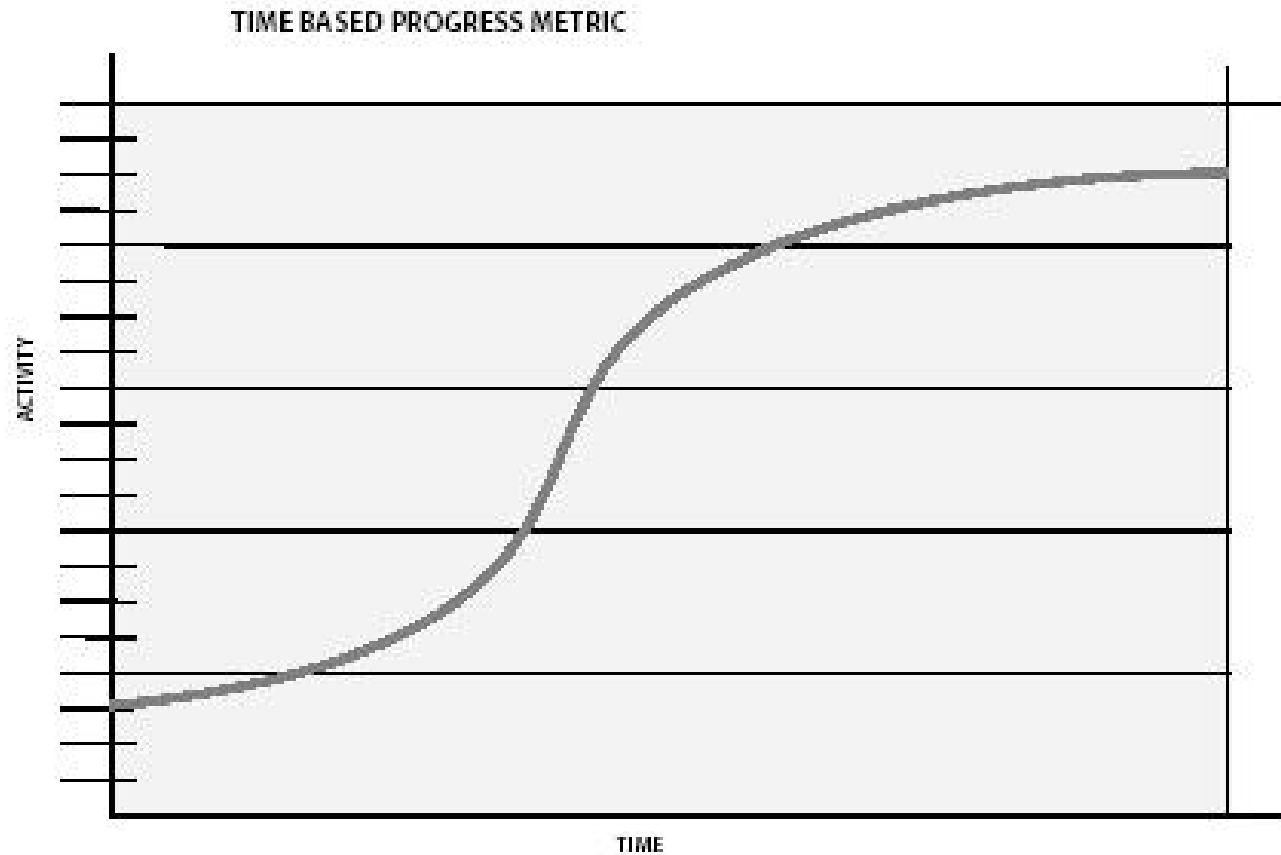
Path to Completion

- Embodies all of the Project Manager's art in planning.
- Building from the original program schedule, we need to examine the exact process by which a task will be accomplished, not just its starting and ending dates.
- Is the graphical representation of the algorithm by which we calculate progress.

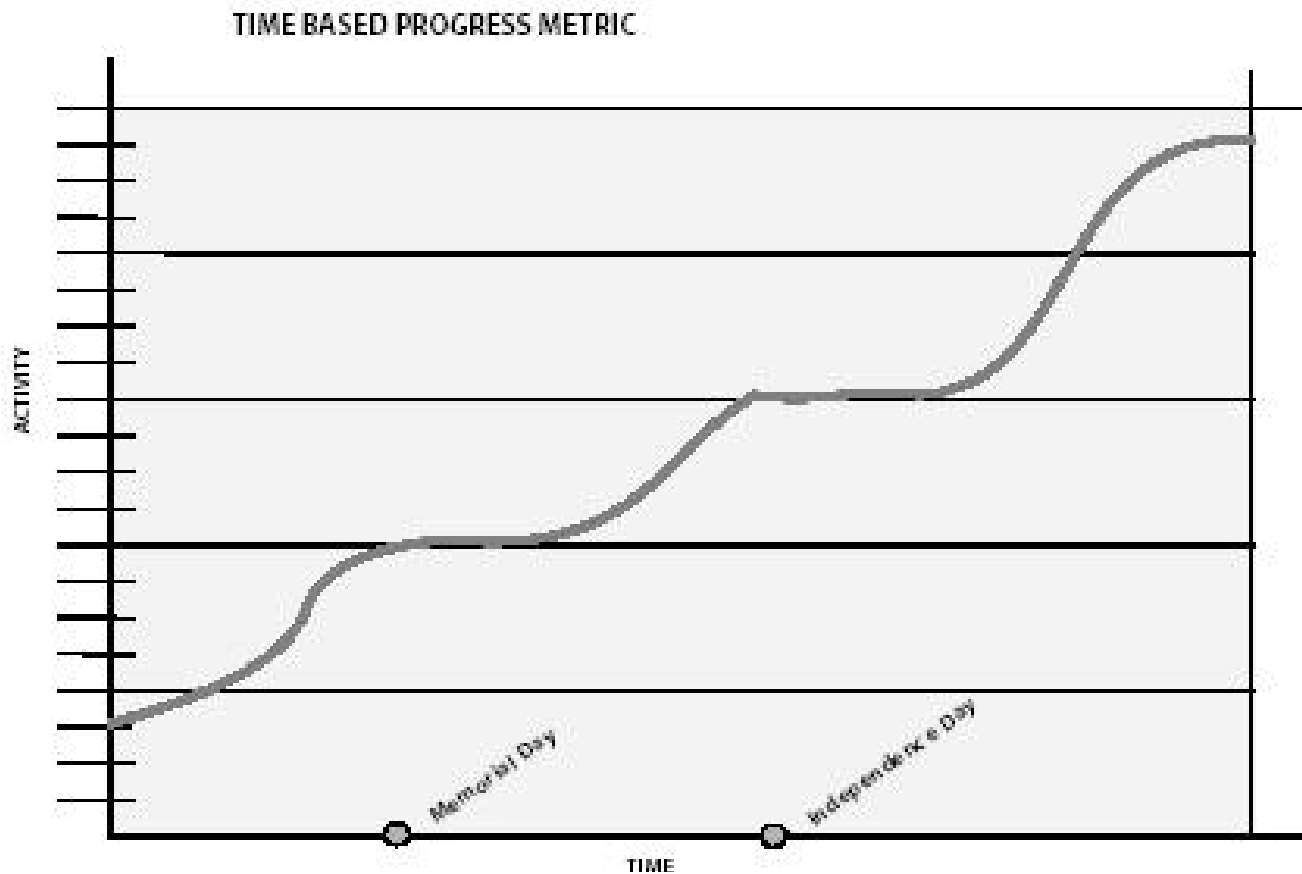
Linear Path to Completion



A Theoretical "S" Curve Path to Completion



“Real World” Path to Completion



Starting Point

- Different tasks (or groups of tasks) will have different predecessors, so our initial assessment of progress must take this into account.

Actual vs. Plan Comparison

- The utility of a Progress Metric arises out of the regular reevaluation of our actual progress, and comparison of that value to our plan.
- Actual progress must be measured using the same algorithm we used to compile the path to completion.

Range of Allowable Values

- We must account for a range of values that will be arranged above and below the theoretical path to completion.
- In addition to the possible range of values associated with our plan line, we also need to be mindful of the error tolerance associated with the measurement of our actual progress.

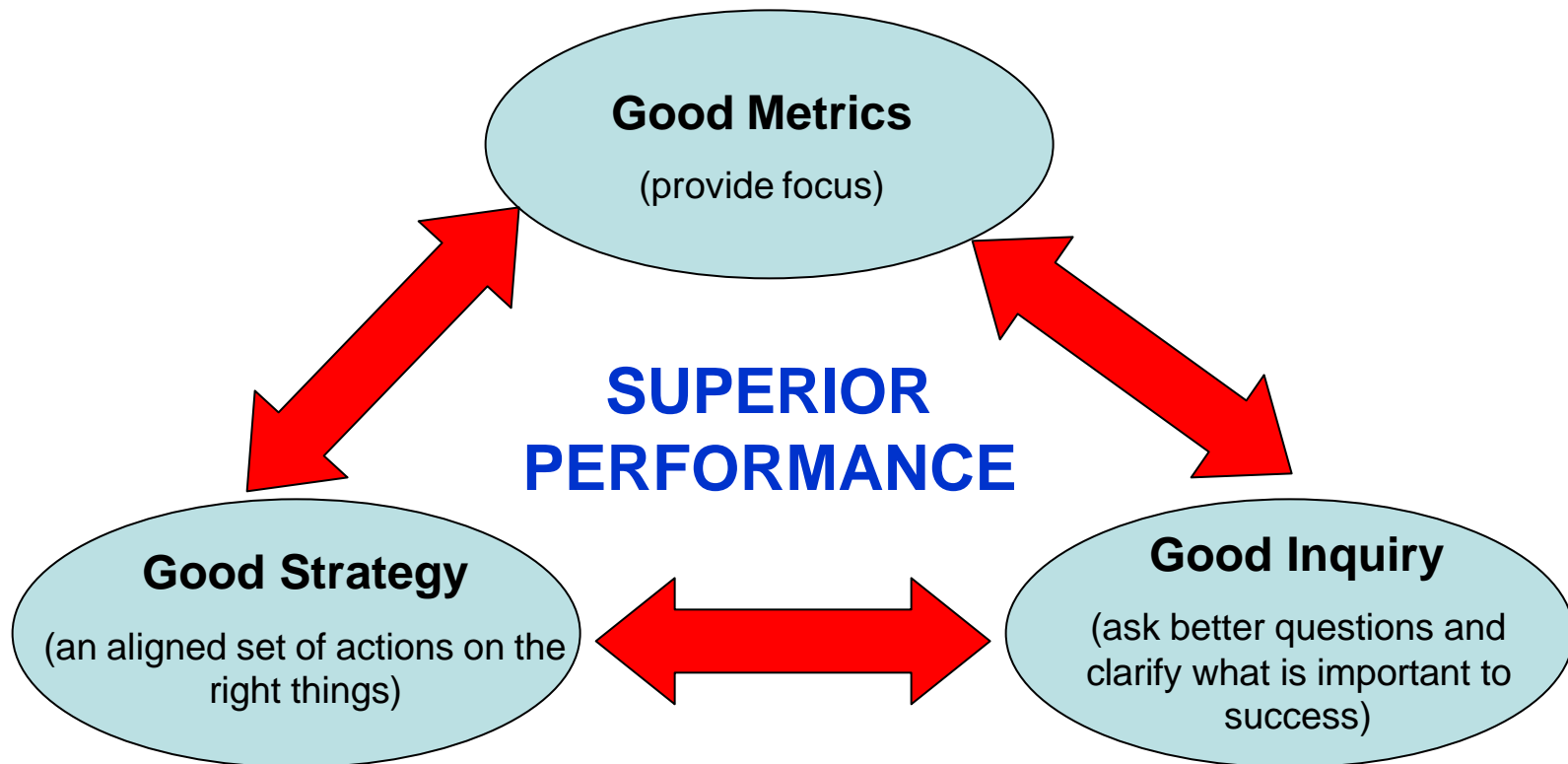
Appropriate Level of Detail

- Is dependent upon what question the metric is trying to answer, and for whom the information is intended.

What is an Effective Metric?

- An effective metric will provide useful information to project or senior management, to allow them to assess the likelihood of success in their undertaking, or to discover areas of concern early enough to take remedial action.
- Is a key tool in proactive project management.
- The metric must be timely.
- It must accurately represent the current state of the project.
- It must be relevant, concise, and focused on its specific task or program area.
- It must be neutral and consistent with all other approved project data.
- It must be accepted as accurate by those responsible for project execution.
- It must be presented in a format that aids in decision-making.

Three Essential Elements



Time-Based, Program Metric

- In which of the following Knowledge Areas of the PMBOK, the Program Metric should be incorporated?
 - a. Scope Management
 - b. Quality Management
 - c. Communications Management
 - d. Time Management

Conclusion

- Progress Metric can be an extremely powerful tool used by Project Managers to monitor and control their projects and programs.
- Are characterized by the following seven key elements:
 - Vision of Success, Purpose of the Metric, Path to Completion, Starting Point, Actual vs. Plan Comparison, Range of Allowable Values and Appropriate Level of Detail.
- Progress Metric must be timely, accurate, relevant, and accepted as meaningful by those responsible for project execution.

“You cannot measure what you cannot describe. You cannot describe what you do not understand, nor can you manage what you do not understand.”

References

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Questions & Answers

