Project Management Institute

PMI LEXICON

of PROJECT MANAGEMENT TERMS

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PREFACE

The *PMI Lexicon of Project Management Terms* is PMI's newest tool for project, program, and portfolio (PPP) managers. PMI stakeholders now have access to a set of frequently used project, program, and portfolio management terms with clear and concise definitions. Further, PMI standards committees—now equipped with a uniform set of definitions that span related PMI standards—will be required to use the *Lexicon* definitions without modification. However, like all dynamic resources at PMI, the *Lexicon* will evolve and improve through a change control process. This process is included herein to encourage recommendations for changes, new terms/definitions, and other suggestions for improvement.

The *PMI Lexicon of Project Management Terms* contains only foundational terms used within professional project, program, and portfolio management. This tool should be used by lexicographers and standards teams as a reference source and not as a glossary of every possible project, program, and portfolio management related term that would normally be defined in the Glossary section of a typical PMI global standard.

PMI would like to thank the PMI standards volunteers who developed this lexicon. Without their expertise, dedication to detail, and passion for their profession, this *Lexicon* would not have been possible. The members of this committee are:

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Acceptance Criteria. A set of conditions that is required to be met before deliverables are accepted.

Activity. A distinct, scheduled portion of work performed during the course of a project.

Actual Cost. The realized cost incurred for the work performed on an activity during a specific time period.

Analogous Estimating. A technique for estimating the duration or cost of an activity or a project, using historical data from a similar activity or project.

Apportioned Effort. An activity where effort is allotted proportionately across certain discrete efforts and not divisible into discrete efforts. (Note: Apportioned effort is one of three earned value management [EVM] types of activities used to measure work performance.)

Assumption. A factor in the planning process that is considered to be true, real, or certain, without proof or demonstration.

Backward Pass. A critical path method technique for calculating the late start and late finish dates by working backward through the schedule model from the project end date.

Baseline. The approved version of a work product that can be changed only through formal change control procedures and is used as a basis for comparison.

Bottom-up Estimating. A method of estimating project duration or cost by aggregating the estimates of the lower-level components of the work breakdown structure (WBS).

Budget at Completion. The sum of all budgets established for the work to be performed.

Change Control. A process whereby modifications to documents, deliverables, or baselines associated with the project are identified, documented, approved, or rejected.

Change Control Board. A formally chartered group responsible for reviewing, evaluating, approving, delaying, or rejecting changes to the project, and for recording and communicating such decisions.

Change Control System. A set of procedures that describes how modifications to the project deliverables and documentation are managed and controlled.

Change Request. A formal proposal to modify any document, deliverable, or baseline.

Code of Accounts. A numbering system used to uniquely identify each component of the work breakdown structure.

Communications Management Plan. A component of the project, program, or portfolio management plan that describes how, when, and by whom information will be administered and disseminated.

Constraint. A limiting factor that affects the execution of a project, program, portfolio, or process.

Control Account. A management control point where scope, budget, actual cost, and schedule are integrated and compared to earned value for performance measurement.

Corrective Action. An intentional activity that realigns the performance of the project work with the project management plan.

Cost Management Plan. A component of a project or program management plan that describes how costs will be planned, structured, and controlled.

Cost Performance Index. A measure of the cost efficiency of budgeted resources expressed as the ratio of earned value to actual cost.

Cost Variance. The amount of budget deficit or surplus at a given point in time, expressed as the difference between the earned value and the actual cost.

Crashing. A technique used to shorten the schedule duration for the least incremental cost by adding resources.

Critical Chain Method. A schedule method that allows the project team to place buffers on any project schedule path to account for limited resources and project uncertainties.

Critical Path. The sequence of activities that represents the longest path through a project, which determines the shortest possible duration.

Critical Path Activity. Any activity on the critical path in a project schedule.

Critical Path Method. A method used to estimate the minimum project duration and determine the amount of scheduling flexibility on the logical network paths within the schedule model.

Data Date. A point in time when the status of the project is recorded.

Decision Tree Analysis. A diagramming and calculation technique for evaluating the implications of a chain of multiple options in the presence of uncertainty.

Decomposition. A technique used for dividing and subdividing the project scope and project deliverables into smaller, more manageable parts.

Defect Repair. An intentional activity to modify a nonconforming product or product component.

Deliverable. Any unique and verifiable product, result, or capability to perform a service that is required to be produced to complete a process, phase, or project.

Discrete Effort. An activity that can be planned and measured and that yields a specific output. (Note: Discrete effort is one of three earned value management [EVM] types of activities used to measure work performance.)

Early Finish Date. In the critical path method, the earliest possible point in time when the uncompleted portions of a schedule activity can finish based on the schedule network logic, the data date, and any schedule constraints.

Early Start Date. In the critical path method, the earliest possible point in time when the uncompleted portions of a schedule activity can start based on the schedule network logic, the data date, and any schedule constraints.

Earned Value. The measure of work performed expressed in terms of the budget authorized for that work.

Earned Value Management. A methodology that combines scope, schedule, and resource measurements to assess project performance and progress.

Effort. The number of labor units required to complete a schedule activity or work breakdown structure component, often expressed in hours, days, or weeks.

Enterprise Environmental Factors. Conditions, not under the immediate control of the team, that influence, constrain, or direct the project, program, or portfolio.

Estimate at Completion. The expected total cost of completing all work expressed as the sum of the actual cost to date and the estimate to complete.

Estimate to Complete. The expected cost to finish all the remaining project work.

Fast Tracking. A schedule compression technique in which activities or phases normally done in sequence are performed in parallel for at least a portion of their duration.

Finish-to-Finish. A logical relationship in which a successor activity cannot finish until a predecessor activity has finished.

Finish-to-Start. A logical relationship in which a successor activity cannot start until a predecessor activity has finished.

Forward Pass. A critical path method technique for calculating the early start and early finish dates by working forward through the schedule model from the project start date or a given point in time.

Free Float. The amount of time that a schedule activity can be delayed without delaying the early start date of any successor or violating a schedule constraint.

Gantt Chart. A bar chart of schedule information where activities are listed on the vertical axis, dates are shown on the horizontal axis, and activity durations are shown as horizontal bars placed according to start and finish dates.

Human Resource Management Plan. A component of the project or program management plan that describes how the roles and responsibilities, reporting relationships, and staff management will be addressed and structured.

Lag. The amount of time whereby a successor activity is required to be delayed with respect to a predecessor activity.

Late Finish Date. In the critical path method, the latest possible point in time when the uncompleted portions of a schedule activity can finish based on the schedule network logic, the project completion date, and any schedule constraints.

Late Start Date. In the critical path method, the latest possible point in time when the uncompleted portions of a schedule activity can start based on the schedule network logic, the project completion date, and any schedule constraints.

Lead. The amount of time whereby a successor activity can be advanced with respect to a predecessor activity.

Lessons Learned. The knowledge gained during a project which shows how project events were addressed or should be addressed in the future for the purpose of improving future performance.

Level of Effort. An activity that does not produce definitive end products and is measured by the passage of time. (Note: Level of effort is one of three earned value management [EVM] types of activities used to measure work performance.)

Logical Relationship. A dependency between two activities or between an activity and a milestone.

Milestone. A significant point or event in a project, program, or portfolio.

Most Likely Duration. An estimate of the most probable activity duration that takes into account all of the known variables that could affect performance.

Opportunity. A risk that would have a positive effect on one or more project objectives.

Optimistic Duration. An estimate of the shortest activity duration that takes into account all of the known variables that could affect performance.

Organizational Breakdown Structure. A hierarchical representation of the project organization, which illustrates the relationship between project activities and the organizational units that will perform those activities.

Organizational Process Assets. Plans, processes, policies, procedures, and knowledge bases specific to and used by the performing organization.

Organizational Project Management Maturity. The level of an organization's ability to deliver the desired strategic outcomes in a predictable, controllable, and reliable manner.

Parametric Estimating. An estimating technique in which an algorithm is used to calculate cost or duration based on historical data and project parameters.

Path Convergence. A relationship in which a schedule activity has more than one predecessor.

Path Divergence. A relationship in which a schedule activity has more than one successor.

Percent Complete. An estimate expressed as a percent of the amount of work that has been completed on an activity or a work breakdown structure component.

Performing Organization. An enterprise whose personnel are the most directly involved in doing the work of the project or program.

Pessimistic Duration. An estimate of the longest activity duration, which takes into account all of the known variables that could affect performance.

Phase Gate. A review at the end of a phase in which a decision is made to continue to the next phase, to continue with modification, or to end a project or program.

Planned Value. The authorized budget assigned to scheduled work.

Portfolio. Projects, programs, subportfolios, and operations managed as a group to achieve strategic objectives.

Portfolio Balancing. The process of optimizing the mix of portfolio components to further the strategic objectives of the organization.

Portfolio Management. The centralized management of one or more portfolios to achieve strategic objectives.

Precedence Diagramming Method. A technique used for constructing a schedule model in which activities are represented by nodes and are graphically linked by one or more logical relationships to show the sequence in which the activities are to be performed.

Predecessor Activity. An activity that logically comes before a dependent activity in a schedule.

Preventive Action. An intentional activity that ensures the future performance of the project work is aligned with the project management plan.

Probability and Impact Matrix. A grid for mapping the probability of each risk occurrence and its impact on project objectives if that risk occurs.

Procurement Management Plan. A component of the project or program management plan that describes how a team will acquire goods and services from outside of the performing organization.

Product Life Cycle. The series of phases that represent the evolution of a product, from concept through delivery, growth, maturity, and to retirement.

Program. A group of related projects, subprograms, and program activities that are managed in a coordinated way to obtain benefits not available from managing them individually.

Program Management. The application of knowledge, skills, tools, and techniques to a program to meet the program requirements and to obtain benefits and control not available by managing projects individually.

Program Management Office. A management structure that standardizes the program-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques.

Progressive Elaboration. The iterative process of increasing the level of detail in a project management plan as greater amounts of information and more accurate estimates become available.

Project. A temporary endeavor undertaken to create a unique product, service, or result.

Project Calendar. A calendar that identifies working days and shifts that are available for scheduled activities.

Project Charter. A document issued by the project initiator or sponsor that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities.

Project Life Cycle. The series of phases that a project passes through from its initiation to its closure.

Project Management. The application of knowledge, skills, tools, and techniques to project activities to meet the project requirements.

Project Management Office. A management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques.

Project Management Plan. The document that describes how the project will be executed, monitored, and controlled.

Project Manager. The person assigned by the performing organization to lead the team that is responsible for achieving the project objectives.

Project Phase. A collection of logically related project activities that culminates in the completion of one or more deliverables.

Project Schedule. An output of a schedule model that presents linked activities with planned dates, durations, milestones, and resources.

Project Schedule Network Diagram. A graphical representation of the logical relationships among the project schedule activities.

Project Scope. The work performed to deliver a product, service, or result with the specified features and functions.

Project Scope Statement. The description of the project scope, major deliverables, assumptions, and constraints.

Quality Management Plan. A component of the project or program management plan that describes how an organization's quality policies will be implemented.

Requirement. A condition or capability that is required to be present in a product, service, or result to satisfy a contract or other formally imposed specification.

Requirements Management Plan. A component of the project or program management plan that describes how requirements will be analyzed, documented, and managed.

Requirements Traceability Matrix. A grid that links product requirements from their origin to the deliverables that satisfy them.

Resource Breakdown Structure. A hierarchical representation of resources by category and type.

Resource Calendar. A calendar that identifies the working days and shifts upon which each specific resource is available.

Resource Leveling. A technique in which start and finish dates are adjusted based on resource constraints with the goal of balancing demand for resources with the available supply.

Responsibility Assignment Matrix. A grid that shows the project resources assigned to each work package.

Risk. An uncertain event or condition that, if it occurs, has a positive or negative effect on one or more project objectives.

Risk Acceptance. A risk response strategy whereby the project team decides to acknowledge the risk and not take any action unless the risk occurs.

Risk Avoidance. A risk response strategy whereby the project team acts to eliminate the threat or protect the project from its impact.

Risk Breakdown Structure. A hierarchical representation of risks that is organized according to risk categories.

Risk Category. A group of potential causes of risk.

Risk Management Plan. A component of the project, program, or portfolio management plan that describes how risk management activities will be structured and performed.

Risk Mitigation. A risk response strategy whereby the project team acts to reduce the probability of occurrence or impact of a risk.

Risk Register. A document in which the results of risk analysis and risk response planning are recorded.

Risk Transference. A risk response strategy whereby the project team shifts the impact of a threat to a third party, together with ownership of the response.

Rolling Wave Planning. An iterative planning technique in which the work to be accomplished in the near term is planned in detail, while the work in the future is planned at a higher level.

Schedule Baseline. The approved version of a schedule model that can be changed only through formal change control procedures and is used as a basis for comparison to actual results.

Schedule Compression. A technique used to shorten the schedule duration without reducing the project scope.

Schedule Management Plan. A component of the project or program management plan that establishes the criteria and the activities for developing, monitoring, and controlling the schedule.

Schedule Model. A representation of the plan for executing the project's activities, including durations, dependencies, and other planning information, used to produce a project schedule along with other scheduling artifacts.

Schedule Model Analysis. A process used to investigate or analyze the output of the schedule model in order to optimize the schedule

Schedule Performance Index. A measure of schedule efficiency expressed as the ratio of earned value to planned value.

Schedule Variance. A measure of schedule performance expressed as the difference between the earned value and the planned value.

Scope Baseline. The approved version of a scope statement, work breakdown structure (WBS) and its associated WBS dictionary, which can be changed only through formal change control procedures and is used as a basis for comparison.

Scope Creep. The uncontrolled expansion to product or project scope without adjustments to time, cost, and resources.

Scope Management Plan. A component of the project or program management plan that describes how the scope will be defined, developed, monitored, controlled, and validated.

S-Curve Analysis. An earned value management technique used to indicate performance trends by using a graph that displays cumulative costs over a specific time period.

Secondary Risk. A risk that arises as a direct result of implementing a risk response.

Sponsor. A person or group that provides resources and support for the project, program, or portfolio, and is accountable for enabling success.

Staffing Management Plan. A component of the human resource plan that describes when and how team members will be acquired and how long they will be needed.

Stakeholder. An individual, group, or organization that may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project, program, or portfolio.

Start-to-Finish. A logical relationship in which a successor activity cannot finish until a predecessor activity has started.

Start-to-Start. A logical relationship in which a successor activity cannot start until a predecessor activity has started.

Successor Activity. A dependent activity that logically comes after another activity in a schedule.

Summary Activity. A group of related schedule activities aggregated and displayed as a single activity.

Threat. A risk that would have a negative effect on one or more project objectives.

Three-Point Estimate. A technique used to estimate cost or duration by applying an average or weighted average of optimistic, pessimistic, and most likely estimates when there is uncertainty with the individual activity estimates.

To-Complete Performance Index. A measure of the cost performance that is required to be achieved with the remaining resources in order to meet a specified management goal, expressed as the ratio of the cost to finish the outstanding work to the remaining budget.

Total Float. The amount of time that a schedule activity can be delayed or extended from its early start date without delaying the project finish date or violating a schedule constraint.

Trigger Condition. An event or situation that indicates that a risk is about to occur.

Variance Analysis. A technique for determining the cause and degree of difference between the baseline and actual performance.

Variance at Completion. A projection of the amount of budget deficit or surplus, expressed as the difference between the budget at completion and the estimate at completion.

WBS Dictionary. A document that provides detailed deliverable, activity, and scheduling information about each component in the work breakdown structure.

What-If Scenario Analysis. The process of evaluating scenarios in order to predict their effect on project objectives.

Work Breakdown Structure. A hierarchical decomposition of the total scope of work to be carried out by the project team to accomplish the project objectives and create the required deliverables.

Work Package. The work defined at the lowest level of the work breakdown structure for which cost and duration can be estimated and managed.

Workaround. A response to a threat that has occurred, for which a prior response had not been planned or was not effective.