Glossary and Acronyms

Acceptance: Accept a risk (take no preventive action).

Activity Code: A WBS code to which budgeted costs and actual costs are assigned.

Activity-on-Arrow (AOA): A network diagramming technique in which activities are represented by arrows and the nodes represent the coordination of activities in regard to the sequencing of the work (same as ADM).

Activity-on-Node (AON): A network diagramming technique in which activities are represented by nodes and the lines represent dependencies (same as PDM).

Actual Cost: The costs that are to be incurred and are to be charged to the project.

Actual Cost of Work Performed (ACWP): The costs that have already been incurred and are charged to the project as of a point in time.

Alpha Testing: Prerelease testing in which a small friendly sampling of the targeted customer base tries out the product.

AP: Agile Programming or Accounts Payable.

Application Frameworks: A holistic set of software specifications for the interaction and assembly of multiple reusable patterns.
Apportioned Effort (AE): In earned value analysis, a method of distributing value to activities whose progress is governed by another activity.

AR: Accounts Receivable.

Arrow Diagramming Method (ADM): A network diagramming technique in which activities are represented by arrows and the nodes represent the coordination of activities in regard to the sequencing of the work.

As-Built Documentation: Text and diagrams that describe the system as it was actually built.

Authorized Unpriced Work (AUW): Work that has been authorized, but for which a budget has not set.

Authorized Work (AW): Work that has been planned, priced, and for which authority has been received to commence.

Avoidance: Eliminate the cause of a risk event or reduce the EMV via reducing risk probability.

Backward Pass: Calculating the latest start dates moving from the finish date of a project to the left along a network.

Balanced Matrix: A matrix type of organizational structure functional managers and project managers have the same priority.

Balanced Score Card (BSC): A modern method for strategic planning.

Bar Chart: A depiction of project task and schedule data that uses horizontal bars on a time scale to represent activity. The most common form of such is the Gantt chart.

Baseline Schedule: A copy of the project schedule when the project starts before change orders; the original plan.

Benefiting Organization: The organization benefiting from the work of the project.

Beta Testing: Prerelease testing in which a significant sampling of the targeted customer base tries out the product.
Bid Documents: A set of documents issued for purposes of soliciting bids in the course of the procurement process.

Black Box: A process done without knowledge of the inner workings of the subject of the work, as in Black Box Testing.

Budget at Completion (BAC): The total budget for a project.

Budgeted Cost of Work Performed (BCWP): A measure of the value of work performed so far based upon the initial estimated cost for said work as of a point in time (same as “earned value”).

Budgeted Cost of Work Scheduled (BCWS): The planned cost for project work as of a point in time.

Bug: A malfunction in a hardware or software product.

Burden: The difference between the full cost of a resource (i.e., a person) and the amount paid to that resource. For a person, it would include employer taxes (FICA, MEDI, FUTA, SUTA), workmen’s compensation, benefits, and so on.

Business Risk: An uncertain situation that could result in a gain or a loss.

CBS: Contractor Breakdown Structure.

CBSE: Component-Based Software Engineering.

CFO: Chief Financial Officer.

Change Control: The process of managing changes to the project’s baselines to determine which changes to include and which not to include.

Change Control Board (CCB): A formal group of stakeholders responsible for approving or rejecting changes to the project baselines.

Change Management: A formal process for managing changes to the project.

Change Management Plan: The formal plan for managing changes to the project.
**Change Order:** A request to the performing organization to modify a requirement or deliverable.

**CIO:** Chief Information Officer.

**CKO:** Chief Knowledge Officer.

**CMM:** Capability Maturity Model.

**COCOMO:** Constructive Cost Model.

**Communication Plan:** A formal plan for how, when, where, and what information will be exchanged amongst project stakeholders.

**Configuration Management:** Managing changes to a hardware/software configuration in a holistic and cohesive manner so that performance and integrity is not compromised.

**Conflict Resolution:** The process of seeking resolution to conflicts amongst project stakeholders.

**Contingency:** Money or amounts of time may be set aside to be used in the event of risks occurring during the project.

**Contract:** A legally binding agreement between competent parties to acquire legal goods or services in trade for some form of compensation.

**Contract Administration:** Managing a relationship with a vendor including all necessary documents and deliverables.

**Contract Closeout:** Processes and activities which assure that the contractor has fulfilled all contractual obligations and has released all claims in regard to the work performed.

**Contract Price:** The amount payable by the customer under the terms of the contract for work done and deliverables received.

**Contract Target Cost (CTC):** The sum of authorized and priced work excluding unpriced work.
**Contractor:** The party who performs work on behalf of another based on a legally binding contract.

**Control Code:** In our notation, a WBS code which has subsidiary activity codes. Costs, both planned and actual, are posted to the activity accounts and rolled-up to control accounts. (In C/SCSC, a cost account.)

**CORBA:** Commonobject request broker architecture.

**Cost Account:** In the United States C/SCSC, a budget account associated with a WBS element, at which lower level tasks are gathered for management purposes (and assigned to one organizational element). (Also called control code in ANSI and DoD EVA.)

**Cost Benefit Analysis:** The ratio of a endeavor’s estimated cost to its anticipated benefit.

**Cost Performance Index (CPI):** The cost efficiency factor representing the relationship between the actual costs incurred and the planned value of the work performed (earned value)—BCWP/ACWP.

**Cost/Schedule Control System Criteria (C/SCSC):** A reporting and control system devised by the U.S. Department of Defense for its contractors to use to minimize and anticipate cost overruns.

**COTS:** Commercial Off the Shelf Software.

**CPAF:** Cost Plus Award Fee.

**CPFF:** Cost Plus Fixed Fee.

**CPIF:** Cost Plus Incentive Fee.

**CPM (Critical Path Model):** A network diagram using a single time estimate per task to determine the longest sequence(s) of connected (dependent) tasks.

**Crashing:** Decrease the duration of a task(s) or activity typically by increasing the expenditure of resources or moving resources to critical path tasks.

**Critical Path:** The set of inter-dependent tasks that must finish on time for the entire project to finish on schedule.
Critical Success Criteria (CSC): The principles or standards by which the success of a project will be judged.

Critical Success Factors (CSF): Any circumstance, fact, or influence which contributes to a critical success criteria; measurable factors that are most important to a project’s success criteria.

CSD: Cleanroom Software Development.

CTO: Chief Technical Officer.

Decision Tree: A graphical representation of a decision process with alternatives.

Deflection: Assign (transfer) a risk to another party.

Deliverable: A specific tangible product or observable event that is to be produced by a project. Examples include such things as an item of hardware, document, a software product, a process definition, a training session, etc. Deliverables are usually nouns, as opposed to tasks which are verbs.

Delphi Technique: A process where a consensus is reached facilitated by experts; for projects it is often used as an estimating technique.

Dependency: A relation between task, such that one cannot either start (or finish) until another either finishes (or starts).

Design Review: A formal review of the design of a product in regard to the project requirements and other standards or constraints.

Direct Costs: Costs that are directly the result of the activity associated with a project task.

Discounted Cash Flow (DCF): Calculation of the present value of a projected cash flow (income minus expense) based on some an interest rate and compounding period.

Drill Down: The opposite of “roll-up” or summarization; digging deeper into a structure (such as the WBS) to get more detail information.
**Dummy Activity**: An activity of zero duration used to show a dependency relationship in the arrow diagramming method.

**Duration**: The length of calendar time needed to complete an activity. Original duration is the original planned completion time of a task, remaining duration is the time left to complete the task.

**Early Finish**: The earliest date on which a task can finish. It is based on the task's early start which may depend on the finish of predecessor activities and the activity's effort requirements.

**Early Start**: The earliest date on which a task can begin. It is dependent on when all predecessor tasks finish.

**Earned Value (EV)**: The planned cost for project work completed as of a point in time; a measure of the value of work performed so far based upon the initial estimated cost for said work (same as "budgeted cost of work performed").

**Effort**: The amount of labor units necessary to complete a task, usually expressed in person-hours.

**Engineering Change Notice (ECN)**: The formal release of a software design change.

**Enterprise Resource Planning (ERP)**: Integrated software and procedures for an organization to operate and automate its key business processes; typically relies on a central relational database management system.

**EOC**: Element of Cost.

**Estimate at Completion (EAC)**: Estimated total cost of project work when the project is finally completed.

**Estimate to Complete (ETC)**: The estimated money required to completed the work of the project.

**EVA**: Earned Value Analysis (also EVMS).
Executive Sponsor: The executive typically responsible for the project purpose and direction; may have sponsored the project or had the initial idea for the project (also called “project sponsor” or “champion”).

Expected Monetary Value: The product of an event’s probability of occurrence and the monetary gain or loss that will result.

Factor: A circumstance, fact, or influence which contributes to a result or has an effect on a result.

Fast Tracking: Compressing a project schedule by doing some tasks in parallel that would normally be done in sequence; starting a task before its predecessor task(s) have completed.


Float: The difference between the time available for performing a task and the time required to complete it.

Forward Pass: Calculating the earliest start dates moving from the start date of a project to the right along a network.

FPIF: Fixed Price Incentive Fee.

Free Float: The maximum amount by which a task can be delayed beyond its early dates without delaying any successor task beyond its early dates.

Free Slack: The amount of time a task can slip without delaying another task.

Function Point (FP): Individual high level software components such as screens and reports that are classified by degrees of complexity.

Function Point Analysis (FPA): A software development estimating technique that was is characterized by breaking software deliverables into function points.

Gantt Chart: A chart using horizontal time lines that illustrates tasks in a project.

GL: General Ledger.
**Goal Seek:** Back solving a model by allowing certain variables to change to optimize some criteria.

**Groupware:** Software which facilitates groups of people working together to collaborate in decision processes or other work efforts.

**GUI:** Graphical User Interface.

**Hammock:** A summary activity that encompasses several tasks; it does not change or schedule dates for the tasks that are encompassed.

**Headcount:** Total hours expended divided by the average hours worked per employee per week.

**Human Resource Management:** The processes, functions, policies, and procedures involved with the management of people and their needs.

**Impact:** An assessment of the adverse effect (usually in money) of a risk event.

**Incentive Contract:** A contractual arrangement where the contractor is rewarded with a higher fee if performance (time, cost, quality) is above contract specified level.

**Indirect Costs:** The costs for common resources or expenses that are not associated with any one task.

**Insurable Risk:** A particular type of risk which can only involve a loss (not a gain) which is often covered by an insurance policy.

**Internal Rate of Return (IRR):** The value of the interest rate that causes the net present value of future cash flows (income minus expense) to be zero.

**Invitation for Bid (IFB):** A formal request to a vendor for one price for total job, perhaps with a breakdown or with rates for specific extras.

**JAD:** Joint Application Development.

**Key Performance Indicators (KPI):** Those management indicators that are determined to reflect most directly on the key objectives of the project.
Kick Off Meeting: The first official stakeholder meeting for a project.

KISS: Keep It Simple, Stupid.

KLOC: Thousands of lines of code.

Knowledge Management: The formal management of information and knowledge as an asset; includes information acquisition, maintenance, access, and distribution.

Lag: The amount of time after one task is finished before the next task can be started.

LAMP: An open source architecture for the development of software (Linux-Apache-MySQL-PHP).

Late Finish: The latest time a task may be completed without delaying the entire project.

Late Start: The latest time a task may start without delaying the entire project.

Lead: The minimum time between the start of one task and the start of an overlapping task.

Lessons Learned: The stakeholders’ learning from the project; usually documented during closeout.

Letter of Intent: A non-legally binding letter issued to a contractor to confirm the award of a contract pending the signing of a formal contract.

Level of Effort (LOE): A task of a general nature that has a uniform rate of effort over all or a portion of the project.

Lifecycle: A group of work phases which determines the formal methodology for building and maintaining something.

Liquidated Damages: A contractual arrangement that provides for a final non-negotiable settlement for a loss due to some aspect of non-performance on a contract other than cost such as time or quality.

LOC: Line of Code.
**M&A**: Management and Administration.

**Managerial Reserves**: The reserve accounts for various contingencies (such as risk) of a project.

**Matrix Management**: A cooperative organizational approach in which both project managers and line managers cooperate in regard to resource management.

**Maturity Model**: A framework used as a basis for determining the degree of maturity of an organization with regard to a particular discipline or part thereof.

**Mean**: A measure of central tendency that divides the area under a probability curve into two equal parts.

**Methodology**: An organized system of “know-how.”

**Milestone**: A major event in a project’s schedule that is easily identifiable by such things as the completion of a significant deliverable, the occurrence of an event, and so on.

**Mitigation**: Reducing risk EMV via reducing the impact of the risk event.

**Monte Carlo Method**: A statistical method involving the generation of random numbers within a prescribed range to represent the value of a factor in a project.

**Most Likely Time**: The most realistic time estimate for completing a task under normal conditions.

**MOU**: Memo of Understanding.

**MRP**: Manufacturing (material) Resource (requirements) Planning.

**MVC**: Model View Controller (a design pattern for user interface construction).

**Net Present Value (NPV)**: The difference between the discounted (based on a fixed interest and compounding period) present value of benefits (income) and the discounted present value of expense (costs).

**Network Diagram**: A schematic drawing of the logical relationship of the tasks in a project.
Nonconformance: The failure of a product (or component thereof) to conform to specified requirements for any quality attribute.

Noncritical Activity: A task which is not on the critical path.

O&M: Operations and Maintenance.

OBS: Organizational Breakdown Structure.

OO: Object Oriented.

Open End: An activity other than project start or finish that does not have both a predecessor task and a successor task (to be avoided in good scheduling).

Optimistic Estimate: The minimum reasonable time in which a task might be completed.

Organizational Breakdown Structure (OBS): A hierarchical structure of organization components.

Original Duration (OD): The original planned time for a project or task.

Outsourcing: The procurement of goods or services from outside of one’s own overall organization.

Parametric Estimating: An estimating technique that uses a mathematical relationship between relevant variables. The constants in these relationships are derived from historical data.

Parent Task: A task within the work breakdown structure that encompasses one or more subordinate child tasks.

Pareto Diagram: A histogram of relevant, ordered by frequency of occurrence.

PBS: Part Breakdown Structure.

Percent Complete (PC): A ratio comparing the part of a task complete to the total effort of the task.
**Performance Indexes:** Project planning and status indicators that measure variances in regard to key metrics.

**Performance Measurement Baseline (PMB):** The portion of the total project budget for which the project manager is responsible and against which performance is to be measured.

**Performing Organization:** The organization doing (or primarily responsible for) the project work.

**PERT Analysis:** A process by which a probable outcome (i.e., a task effort estimate) is based on three specific estimates: best case, most likely, and worst case.

**PERT Chart:** A network diagram that shows all tasks and task dependencies.

**Pessimistic Estimate:** The maximum reasonable time to complete a task should all things go poorly (does not include the occurrence of unforeseen risks).

**Phase:** A major period in the life of a project.

**Planned Cost:** Costs set when the project work starts and the current schedule becomes the baseline.

**PMBOK:** The Project Management Institute’s Project Management Body of Knowledge publication.

**Portfolio Management:** The management of a number of projects (that do not share a common objective) in regard to the selection of which projects to initiate.

**Precedence:** A task has precedence over another task, if the first must be completed before the second task starts.

**Precedence Diagram Method (PDM):** A method of drawing a network diagram using nodes to represent the activities and lines to show dependencies.

**Predecessor Task:** A task that must start or finish before another task can start or finish.

**Present Value:** The calculation in current dollars of a regular stream of future payments or income using a specific interest rate and compounding period.
**Prime Contractor:** The contractor with overall responsibility for delivery a project or a contract in general; the prime contract will coordinate and oversee the work of subcontractors.

**Probability:** The likelihood of occurrence.

**Procurement:** The establishing contractual relationships to obtain goods or services.

**Production Rate:** An older term for SPI.

**Productivity:** The rate of output creation per unit of time.

**Program:** A set of projects with a common goal managed collectively.

**Program Evaluation and Review Technique (PERT):** A project management technique for estimating how much time is needed to complete the work. Each task is assigned a best, worst, and most likely completion time estimate. These estimates are used to determine the mean completion time via a Beta distribution.

**Program Management:** The management of a set of projects with a common goal which may also include operational aspects.

**Project Charter:** A document that describes a project in terms of its overall scope, schedule, dependencies, assumptions and resources. It is the official “go-ahead” document for the project and establishes a clear overall level of understanding between the sponsor, upper management, and the rest of the project team.

**Project Management (from Wikipedia):** “The ensemble of activities (such as tasks) concerned with successfully achieving a set of goals. This includes planning, scheduling and maintaining progress of the activities that comprise the project. Reduced to its simplest project management is the discipline of maintaining the risk of failure at as low a value as necessary over the lifetime of the project. Risk of failure arises primarily from the presence of uncertainty at all stages of a project. An alternate point of view is that project management is the discipline of defining and achieving targets while optimizing the use of resources (time, money, people, space, etc.).”

**Project Management Information System (PMIS):** A system for gathering, processing, and reporting project related information; usually the system involves (or is) a software package(s).
**Project Management Office (PMO):** A group of technical and business personnel who oversee and/or foster professional project management practices within an organization.

**Project Management Professional (“PMP”):** The highest level of professional certification by the Project Management Institute.

**Project Manager (PM) (from Wikipedia):** Project management is the province and responsibility of an individual project manager. This individual seldom participates directly in the activities that produce the end result, but rather strives to maintain the progress and productive mutual interaction of various parties in such a way that overall risk of failure is reduced.”

**Project Sponsor:** The executive typically responsible for the project purpose and direction; may have sponsored the project or had the initial idea for the project (also called executive sponsor or champion).

**Projectized Organization:** Any organizational structure in which the project manager has full authority over the personnel assigned to a project.

**Prototype:** A model encompassing some but not all features of the desired product.

**QFD:** Quality Function Deployment.

**Quality:** Conformance to requirements, specifications, and standards and fitness for use in a defined environment for specific purposes.

**Quality Assurance (QA):** Actions, policies, and procedures necessary to provide adequate confidence that a product or service will satisfy given requirements for quality.

**Quality Control (QC):** The process of monitoring specific quality tests to determine if they comply with relevant quality standards.

**Quality Management:** Those portions of the overall project management processes that determines and implements the quality policy.

**Request for Proposal (RFP):** A formal invitation containing a scope of work which requests a formal response from a vendor indicating how a job will be done and often who (generically or specifically) will be doing the work.
**Request for Quotation (RFQ):** A formal invitation to submit a price or rates for goods and/or services as described in the requesting document.

**Requirements:** A formalized set of measurable customer/user wants and needs.

**Reserve:** Money or time set aside in the total project budget for risks and other unknowns.

**Resource:** Items necessary to complete project work including money, people, equipment, and so on.

**Resource Breakdown Structure (RBS):** A coding structure to identify resources to be used on a project(s).

**Resource Leveling:** A form of network and schedule analysis in which resource requirements are spread evenly across time periods (and possibly projects) for one or more resources.

**Responsibility Assignment Matrix (RAM):** A table correlating resources (either generically or specifically) to tasks; may also be used to correlate organizational responsibility to tasks or groups of tasks.

**Return on Investment (ROI):** The financial return in terms of an interest rate for a given monetary investment.

**Risk:** The possibility of an undesirable outcome.

**Risk Analysis:** An examination of risk areas to assess the impact and likelihood of a risk event (also risk assessment).

**Risk Avoidance:** Eliminate the cause of a risk event or reduce the EMV via reducing risk probability.

**Risk Deflection:** Transferring all or part of a risk to another party, usually by some form of insurance.

**Risk Identification:** The process of identifying all possible risk events which may happen during a project.
**Risk Response**: The planned or actual action in response to a risk event.

**RMI**: Remote Method Invocation.

**ROM**: Rough Order of Magnitude (estimate).

**RUP**: Rational Unified Process.

**Schedule**: A calendar based sequence of tasks representing the order and time at which work will be done.

**Schedule Performance Index (SPI)**: The ratio of the value of the work performed (earned value) to work planned (BCWP/BCWS).

**Schedule Variance (SV)**: A difference between the scheduled completion date of a task(s) and the actual completion date of that task(s); in EVA: BCWP minus BCWS.

**Scope**: A description of the project work to be performed in terms of the desired results and deliverables.

**Scope Creep**: A progressive increase in scope as the project continues.

**Scope Definition**: Breaking down a deliverable in to smaller more manageable parts to allow improved estimation, assignment, and control.

**Scope Management**: The parts of the overall management processes that deal with controlling the work definition.

**Scope of Work (SOW)**: A formal description of the work involved in the production and delivery of the goods or services and/or a description of the goods or services themselves that are part of a job or project.

**SDLC**: Software Development Lifecycle.

**Single Source**: There is a preferred seller for good and/or services to be procured.

**Slack Time**: The amount of time a task can be delayed before it affects another task’s dates or the project completion date.
SOA: Service Oriented Architecture.


Sole Source: There is only one qualified supplier for goods and/or services to be procured.

Sponsor: A person who initiates, finances, has a controlling interest, or champions a project; the sponsor is normally a person in upper management.

Stage Gate: A point in time of a project at which progress and other factors will be reviewed for the purpose of deciding whether the project will continue or not.

Stakeholder: One who has a stake or interest in the outcome of the project.

Standard Deviation: A measure of the dispersion of data points around a mean of a probability distribution.

Statement of Work (SOW): A formal description of the work involved in the production and delivery of the goods or services and/or a description of the goods or services themselves that are part of a job or project.

Status Report: A report produced by the project team on a regular basis showing progress and cost versus plan.

Success Criteria: The principles or standards by which the success of a project will be judged.

Success Factors: Any circumstance, fact, or influence which contributes to a critical success criteria; measurable factors that are most important to a project’s success criteria.

Successor Task: A task that cannot begin until another task has started or finished.

Sunk Costs: Costs which have already been incurred, and cannot be reversed even if the project was canceled.

SWAG: Systematic (scientific) Wild Ass Guess
**SWOT Analysis:** A business or technical analysis of an organization’s strengths, weaknesses, opportunities, and threats.

**Task:** An individual unit of effort which refers to the work that will be assigned to individuals to produce the project’s deliverables. Typically tasks are verbs, and deliverables are nouns.

**TCO:** Total Cost of Ownership.

**Test Plan:** A description of the tests needed to satisfy requirements and standards for the proper completion of a project.

**Time Box:** An amount of calendar time allocated for the completion of a project or phase of a project.

**Total Float (TF):** The amount of time by which a task can be delayed without delaying the project planned completion date.

**Total Quality Management (TQM):** A quality program to encourage guide employees to strive for high quality in all aspects of their work.

**Total Slack:** The amount of time a task can be delayed without affecting the project planned completion date.

**UDDI:** Universal Description Discovery and Integration.

**UML:** Unified Modeling Language.

**Uncertainty:** Lack of knowledge of future events.

**Undistributed Budget (UB):** Budget for work to be done on a project that is within the project’s scope but has not been specifically identified yet.

**Validation:** The process of guaranteeing that the customer/user is satisfied with the product.

**Variable Cost:** A cost that changes with the amount of product produced or the effort expended.
Glossary and Acronyms

**Variance:** Deviation from a plan, or a measure of uncertainty or dispersion.

**Verification:** The process of guaranteeing that the work processes and products comply with specifications.

**Version:** A time sequenced variant of some artifact or product manifestation.

**Version Control:** The process of controlling changes, additions, and deletions to product manifestations as a development process moves from one version of a product to the next.

**Walk-Through:** The physical or logical comprehensive examination of the quality of a work product (such as a design or program unit) in regard to quality metrics and standards; in IT, the walk-through is usually performed by peers.

**W3C:** World Wide Web Consortium.

**White Box:** A process done with detail knowledge of the inner workings of the subject of the work, as in White Box Testing.

**WIMP (Wheels in Motion Person):** Someone who confuses activity with progress.

**Work Breakdown Structure (WBS):** A deliverable oriented grouping of project elements that organizes and defines the total work scope of the project.

**Work Package (WP):** A unit within a work breakdown structure at the lowest level of a branch, not necessarily at the lowest level of the whole WBS.

**WSDL:** Web Services Description Language.

**Workaround:** An unplanned alternative solution to a problem that has arisen.

**XF:** Expected Finish.

**XP:** Extreme Programming.