Professional Certificate in Advanced Project Management

Key Terms Glossary

Key Term	Definition
Activity	The atomic unit of project systems (also known as "jobs" or "tasks"). Activities represent work on scope, making progress toward the completion of a product.
Agent	An autonomous entity with decision-making authority.
Agile coach	An agile coach helps teams adopt and apply agile practices and methods
Agile release train (ART)	This is a collection of several agile teams working together to accomplish a common greater goal.
Agile transformation	The process of an organization transitioning to using agile practices and methods.
Aleatoric uncertainty	Uncertainties that cannot be resolved with any amount of immediate effort.
Analysis	The evaluation of a model to understand likely behavior and performance.
Backlog refinement	The process of defining and sizing tasks by the project team.
Baseline project plan	Includes both the estimate and the commitment from the project manager to the requestor.
Behavioral complexity	How the actions of agents (i.e., people or teams) in a system defy predictability and control.
Black swan	A highly improbable event that has an extreme impact (e.g., natural disaster).
Buffer	Planned extra time added to tasks (usually paths) to account for variance in task durations.
Capabilities	A mix of talent to fit the project's demands. Cost performance index (CPI) The ratio of earned value divided by actual cost incurred (CPI = EV / AC).
Coupled relationship	A task relationship in which the execution of two or more tasks is dependent on the completion of the other or others (i.e., Task A is dependent on Task B, and Task B is dependent on Task A).
Critical chain project management	A project management method that is an extension of the critical path method, which takes task uncertainty and variance into account through buffered schedules.
Critical path	Path with the longest time. The minimum amount of time to complete a project.
Culture	Assumptions that underlie values.
Daily meeting	A regular agile team check-in (also known as daily stand-up or daily scrum).
Dependence	The interaction and coordination required for successful activity outcomes.
Dependency structure matrix (DSM)	A matrix that represents relationships between the elements of a project, such as tasks or processes, components or subsystems, and individuals or teams.

Dynamics	The drivers of performance — how elements and architecture interrelate to determine behavior over time.
Earned duration	A method used to determine the progress of the project duration.
Earned schedule	A method used to determine cost and schedule variance.
Epic	A large body of work that a team can break down into a series of goals and sprints.
Epistemic uncertainty	Uncertainty that, with additional time and effort, can be reduced.
EVMS	A system that compares the planned value of work scheduled, the actual value of work completed, and the earned value of work completed in order to control the project.
Exposure	A measure of a risk's criticality; a combination of probability and effect.
Feeder buffer	A buffer that is located on paths that feed into the critical path. It ensures that delays in the feeding activities do not impact the critical path.
Forecast	A prediction of a future state, ideally based on analysis.
Forecasting	To predict future performance at the project's end by using current information.
Free slack	The amount of time a task can be delayed without delaying the early start of any other tasks.
Gantt chart	A graphical tool that shows tasks and task duration against the larger project schedule.
Generative design	An iterative design process where cross-functional teams generate multiple meaningful plan alternatives.
Heuristics	Strategies that are derived from prior experiences.
Impediment	A blockage that prevents tasks from being completed and slows project progress.
Incremental release	A release of a feature or version of a product to a customer or stakeholder. In incremental development, each successive product version is usable and adds more value to the customer than the previous version.
Interfaces	These are the interdependencies between each team that identify how each team's workflow may affect the progress of another team.
Key performance indicators (KPIs)	KPIs guide organizations and teams toward making more informed business decisions.
Lag	The amount of time before starting a dependent task.
Management reserve	The total amount of contract budget reserved at the beginning of a project.
Mental models	A set of cause-effect beliefs, often accompanied by heuristics, about what to do in certain situations.
Metrics	Standards that help an agile project team monitor team productivity during a project.
Mitigation	An investment to reduce exposure.
Model	A partial representation of a scenario.
Monte Carlo method	A method of simulation used to predict project outcomes based on changes to project variables.
N-square matrix	A matrix with the same number of rows and columns.

Organization DSM	A DSM that depicts the communication and the interactions between teams or individuals involved in a project.
Parallel relationship	A task relationship in which one task's execution is independent of another task (i.e., both tasks can be performed simultaneously).
Performance measurement baseline	The baseline cost, including all work and planning packages.
PERT	Program evaluation and review technique.
Phases	Grouped activities that represent flow of progress over time.
Planned iterations	Represent groups of unknown tasks that are worked on together. The repetition is known but the duration is uncertain.
Planning	A social process through which activities, roles, and dependencies are discovered, awareness is aligned, systemic outcomes are anticipated, and commitments are made to achieve targets.
Planning package	A future phase of the project that is planned at a high level.
Portfolio management	The process of prioritizing, sequencing, and allocating scarce resources among separate projects that work independently with their own objectives.
Process DSM	A DSM that depicts the flow and the relationships between project tasks.
Product	The meaningful result of completed work.
Product backlog	A prioritized list of tasks to be done (also known as "user stories").
Product management	The process of strategizing, planning, engaging stakeholders, and managing the brand for a product, along with overseeing development and administering retirement.
Product owner	A scrum leader who focuses on the outcome, defines tasks, manages the backlog, and communicates with stakeholders.
Program increment (PI) planning	This ceremony brings representatives from every team in the program to decide on features to work on during multiple upcoming sprints and identify interfaces and dependencies.
Program management	The process of managing several related projects to create integrated results and achieve shared goals within an organization.
Project	The combination of people and resources that achieve a goal within a specified period of time.
Project board	The display used for visual management (also known as a "kanban board").
Project buffer	A buffer that handles variance in task durations along the critical path and protects the project completion date and is 50% of path duration using median estimates.
Project charter	A boundary object that leads to early, functional, and ongoing dialogue between the stakeholder(s) and the project team.
Project forecast	Estimation of likely project performance based on the model of the project.
Project management	A body of practices, methods, and tools for the achievement of a project's strategic objectives.
Resource	A stock or supply of material, labor, energy, information, or other assets that is used in the realization of scope.
Resource contention	A conflict in access to a shared resource.

Resource readiness alert	A signal to a project team member signaling the project schedules' dependence on their upcoming work, which consequently informs the team not to interrupt their work.
Retrospective	A team meeting to reflect on and improve team's sprint process.
Risk	An uncertain future condition that would place a project's outcomes outside of acceptable nominal expectations.
Rules	Guidelines for behavior, actions, and interactions.
SAFe	Scaled agile framework: an agile method for managing multiple teams and complex projects.
Scaled agile	Scaled agile describes a set of frameworks that help organizations apply agile methodologies across the entire organization to align every team toward specific goals.
Scenario	A realistic situation or state.
Scheduled performance index (SPI)	The ratio determined by dividing the earned value by the planned value (SPI = EV / PV); compares project completion to the schedule.
Scope	The tangible outcome of project tasks that will be completed during the project.
Scrum	An agile method for small teams to do work rapidly and efficiently.
Scrum master	A team leader who focuses on the team, communication between the team and leadership, management of the project tracking tool, and running daily scrum sessions.
Scrum@Scale	This extends the scrum framework from the individual team level to a framework that can organize many scrum teams at the enterprise level.
Sequential relationship	A task relationship in which one task's execution (Task #2) depends on the completion of another task (Task #1).
Set-based design	A project design approach in which initial requirements are a range of possibilities that are examined for feasibility. Commitment to one design is delayed as long as possible while options are explored and infeasible options are eliminated.
Slack	The amount of time a task may be delayed without affecting other tasks.
Spotify	This is a popular people-centric implementation of scaled agile principles made popular by Spotify.
Sprint	Also known as an iteration, the timeboxed unit to complete tasks and deliverables.
Sprint backlog	The portion of the product backlog that is selected to be worked on in a sprint.
Sprint demonstration (demo)	The phase of the sprint cycle in which the agile team demonstrates its accomplishments to stakeholders to receive feedback.
Sprint planning	The phase of the sprint cycle in which the agile team members determine what they will complete during the sprint.
Sprint planning	The process of selecting product backlog items that will move into the sprint backlog.
Sprint retrospective	The event in the sprint cycle during which the agile team discusses what did and didn't work during the sprint, and how to improve their agile practice.
Sprint review	The phase of the sprint cycle in which the agile team reviews the results of the sprint.

Stage gate	Used for multiple teams and complex projects as stopping points to review a project before moving to the next stage.
Stakeholder	A person who has an interest or investment in a project.
Strategy	A distinct, coherent position and capabilities for achieving sustainable value.
Stretch goal	An organizational goal with an objective probability of attainment that may be unknown but is seemingly impossible given current capabilities (i.e., current practices, skills, and knowledge). [Sitkin et al. definition].
Structural complexity	How the number of elements along with the number and nature of the links (topology) influence the behavior of a system.
Structure	Organization of the project team, given the project's demands.
Swimlane	A type of diagram that visually distinguishes process ownership between various functional teams.
System	A set of physical or virtual objects whose interrelationships enable desired function(s).
System architecture DSM	A DSM that depicts the interfaces between the components of a technical system.
Tacit knowledge	The subjective and informal knowledge that is gained through experience and helps teams succeed and outperform others in stable environments.
Target	The underlying goals described with performance measures as defined by the requestor.
Task	The smallest unit of work in a project.
Task estimation	The interplay between scope and resources.
Team	A group of people who make effort to work and coordinate by applying abilities.
Technological order	The logical order in the sequence of tasks.
Three questions of the daily meeting	What did I get done today? What am I going to work on today? What impediments do I have?
Timebox	The allotted period of time in which a task must be completed or a deliverable must be produced.
Total slack	The maximum amount of time a task may be delayed beyond its early start without delaying total project completion.
Tradespace	A graph of multiple options or scenarios as evaluated across two or more dimensions (e.g., cost, duration, and risk).
Triple constraint (aka Iron Triangle)	The three restrictions on a project: scope, time, and cost.
Unplanned iterations	These are possible process failure modes that are unidentified and need to be recognized for evaluating risk and minimizing rework.
Utopia point	The corner of the tradespace where utility is maximized for all imensions.
Visual management	A method for displaying backlogs.
Waterfall	A project model in which the scope is worked in stages that do not overlap.
Work	A cycle of request, response, activity, and acceptance.
Work package	A phase of the project that is described in detail. A sequence of tasks to be completed soon.