

Project Planning & Implementation

Project Management Knowledge Areas

PROJECT INTEGRATION MANAGEMENT - Processes required to ensure proper coordination of the various project elements, including:

- Plan development—placing results of other planning processes into a consistent, coherent document.
- Project plan execution—carrying out the project plan by performing the activities included therein.
- Overall change control—coordinating changes across the entire project.

PROJECT SCOPE MANAGEMENT - Processes required to ensure the project includes all the work required, and only the work required, to complete the project successfully consisting of:

- Initiation—committing the organization to begin the next phase of the project.
- Scope planning—developing a written scope statement as the basis for future project decisions
- Scope definition—subdividing major project deliverables into smaller, more manageable components.
- Scope verification—formalizing acceptance of the project scope.
- Scope change control—controlling changes to project scope.

PROJECT TIME MANAGEMENT - Processes required to ensure timely completion of the project. It consists of:

- Activity definition—identifying specific activities to be performed to produce project deliverables.
- Activity sequencing—identifying and documenting interactivity dependencies.
- Activity duration estimating—estimating the number of work periods needed to complete activities.
- Schedule development—analyzing activity sequences, durations, and resource requirements to create the project schedule.
- Schedule control—controlling changes to the project schedule.

PROJECT COST MANAGEMENT - Processes required to ensure that the project is completed within the approved budget. It consists of:

- Resource planning—determining what resources (people, equipment, materials) and what quantities of each should be used to perform project activities.
- Cost estimating—developing an approximation of the costs of the resources needed to complete project activities.
- Cost budgeting—allocating the overall cost estimate to individual work items.
- Cost control—controlling changes to the project budget.

PROJECT QUALITY MANAGEMENT - Processes required to ensure that the project will satisfy the needs for which it was undertaken. It consists of:

- Quality planning—identifying which quality standards are relevant to the project and determining how to satisfy them.
- Quality assurance—evaluating overall project performance on a regular basis to provide confidence that the project will satisfy the relevant quality standards.
- Quality control—monitoring specific project results to determine if they comply with relevant quality standards and identifying ways to eliminate causes of unsatisfactory performance.

PROJECT HUMAN RESOURCE MANAGEMENT - Processes required to make the most effective use of the people involved with the project. It consists of:

- Organizational planning—identifying, documenting, and assigning project roles, responsibilities, and reporting relationships.
- Staff acquisition—getting the human resources needed assigned to and working on the project.
- Team development—developing individual and group skills to enhance project performance.

PROJECT COMMUNICATIONS MANAGEMENT - Processes required to ensure timely and appropriate generation, collection, dissemination, storage, and ultimate disposition of project information. It consists of:

- Communications planning—determining the information and communications needs of the stakeholders: who needs what information, when will they need it, and how will it be given to them.
- Information distribution—making needed timely information available to project stakeholders.
- Performance reporting—collecting and disseminating performance information. This includes status reporting, progress measurement, and forecasting.
- Administrative closure—generating, gathering, and disseminating information to formalize phase or project completion.

PROJECT RISK MANAGEMENT - A subset of project management that includes the processes concerned with identifying, analyzing, and responding to project risk. It consists of:

- Risk identification—determining which risks are likely to affect the project and documenting the characteristics of each.
- Risk quantification—evaluating risks and risk interactions to assess the range of possible project outcomes.
- Risk response development—defining enhancement steps for opportunities and responses to threats.
- Risk response control—responding to changes in risk over the course of the project.

PROJECT PROCUREMENT MANAGEMENT - A subset of project management that includes the processes required to acquire goods and services from outside the performing organization. It consists of:

- Procurement planning—determining what to procure and when.
- Solicitation planning—documenting product requirements and identifying potential sources.
- Solicitation—obtaining quotations, bids, offers, or proposals as appropriate.
- Source selection—choosing from among potential sellers
- Contract administration—managing the relationship with the seller.
- Contract close-out—completion and settlement of the contract, including resolution of any open items.

Project Planning & Execution

PROJECT PLANNING:

Scope Planning – Develop a written scope statement for the basis of future project decisions.

Scope Definition – Subdivide the major project deliverables into smaller more manageable components.

Activity Definition – Identify the specific activities that must be performed to produce project deliverables.

Activity Sequencing – Identify and document interactivity dependencies.

Activity Duration – Estimate the number of work periods needed to complete individual activities.

Schedule Development – Analyze activity sequences/durations and resource requirements and create the project schedule.

Resource Planning – Determine what resources (people, equipment, materials) are needed and what quantity of each should be used.

Cost Estimating – Develop an approximation of the costs of resources.

Cost Budgeting – Allocate the overall cost estimate to individual work items.

Quality Planning – Identify which quality standards are relevant to the project and how they will be measured or satisfied.

Organizational Planning – Identify, document and assign project roles, responsibilities and reporting relationships.

Staff Acquisition – Get the necessary human resources needed assigned to the project (simulate).

Communications Planning – Determine the information and communications needs of the stakeholders: who needs what information, when will they need it, and how will it be given to them.

Risk Identification – Determine which risks are likely to affect the project and document the characteristics of each (some risks may be identified later by project team members as a result of further analysis, such as determining that a schedule is extremely aggressive based upon elements).

Risk Quantification – Evaluate the risks and risk interactions to assess the range of possible project outcomes.

Risk Response Development – Define enhancement steps for opportunities and responses to threats.

Procurement Planning – Determine what to procure and when.

Solicitation Planning – Document product requirements and identify potential sources.

Project Plan Development – Take the results of the other planning processes and put them into a consistent coherent document.

PROJECT EXECUTION:

Project Plan execution – carry out the project plan by performing the activities

Scope Verification – formalization and acceptance of the project

Quality Assurance – evaluate overall project performance on a regular basis

Team Development – develop individual and team skills to enhance performance

Information Distribution – make needed information available to stakeholders

Solicitation – obtain quotes, bids, offers, or proposals, as appropriate

Source selection – choose from among potential sellers

Contract Administration – manage relationships with sellers and contractors

PROJECT CONTROL PROCESSES

Overall Change Control – coordination changes across the entire project

Scope Change Control – control changes to the project scope (scope creep)

Schedule Control – control changes to the project schedule

Cost Control – control budgetary changes

Quality Control – monitor specific project results to determine standards compliance

Performance Rating – collect & disseminate performance info (measure, report & forecast)

Risk Response Control – evaluate and respond to changes in risk

PROJECT CLOSURE

Admin Closure – generate, gather, and disseminate required info to formalize or complete

Contract Closure – completion and closure of contractual obligations, including item resolution