**Chapter Notes**

**Project Integration Management**

**Project Integration Management Processes**

* It includes processes required to ensure that the various elements of the project are properly coordinated.
* **Three major processes are:** 
  + Develop Project Charter
  + Develop Project Plan
  + Project Plan Execution
  + Monitor and Control Project Work
  + Integrated Change Control
  + Close Project or Phase
* It focuses on using “tools and techniques” to integrate project management processes.
* It involves making tradeoffs among competing objectives and alternatives to match stakeholder needs and expectations.

**Developing Project Charter**

* Project charter is the document that formally authorizes a project. Projects are usually chartered and authorized external to the project organization (e.g. by a company, a government agency etc.). Projects are chartered as a result of specific needs created by customers, market, advances in technology, changes in laws or societal changes.
* Please pay special attention to tools and techniques for developing project charter described. Examples of tools and techniques include project selection methods, project management methodology, project management information systems (PMIS) and expert judgment.

**Developing Preliminary Project Scope Statement**

* Note: This step is included in the third edition but not the fourth. Nevertheless, developing a preliminary scope is usually part of the project charter. This is basically what the project needs to accomplish. A project scope statement includes listing of project objectives, specific requirements of the product/service, acceptance criteria, constraints, preliminary risk identification, milestones and preliminary cost estimate. This information is developed from the information provided by the project initiator/sponsor.

**Project Plan Development**

* It is an iterative process that uses the outputs of the other planning processes (e.g. strategic planning) to create a consistent plan.
* The purpose is to guide project execution and project control.
* All of the defined work must be planned, estimated and scheduled, and authorized with the use of detailed *integrated management control plans.*

**Tools & Techniques for Project Plan Development**

* Project planning methodology
* Any structured approach used to guide project team during the plan development.
* Expert skills and knowledge
* Every stakeholder has skills and knowledge that may be useful in developing the project plan.
* Project management information system (PMIS)
* It consists of the tools and techniques (manual and automated) used to gather, integrate, and disseminate the outputs of project management processes.
* Specifically, PMIS consists of **(a)** Configuration Management System and **(b)** Change Control System.

**a. Configuration management system**

* A subset of the overall PMIS

It can be used to:

* Identify and document the functional characteristics of an item or system.
* Control any changes to such characteristics.
* Record and report the change and its implementation status.
* Audit the items and system to verify conformance to requirements.

**b. Change control system**

* It is a collection of formal, document procedures.
* Defining how project performance will be monitored and evaluated.
* Including the steps by which official project documents may be changed.
* Allowing “automatic” approval of defined categories of changes.

**Project Plan Execution**

In this process,

* The project product will be created.
* The coordination between the project manager and the project management team is required.
* Performance against the project baselines must be continuously monitored.
* Corrective actions is taken based on actual performance against the project plan.
* Periodic forecasts of the final cost and schedule results will be made to support the analysis.

**Tools & Techniques for Project Plan Execution**

* Project Management methodology
* Project Management Information System (PMIS)

**Some outputs from Project Plan Execution**

* Deliverables
* The outcomes of the activities performed to accomplish the project.
* It is collected as part of project plan execution and fed into the performance reporting process.
* They are also often intangibles, such as people trained who can effectively apply that training.

**Outputs from Project Plan Execution**

* Change requests
* Identified while the work of the project is being done.
* e.g., to expand or contract project scope, to modify cost or schedule estimates.

**Monitoring and Controlling project work**

* This involves monitoring project processes associated with initiating, planning, executing and closing.
* Ensuring that changes to the product scope are reflected in the definition of the project scope.
* Coordinating changes across the entire project.

In addition to techniques such as project management methodology and PMIS, Earned Value technique is also used for monitoring and controlling project work.

**Integrated Change Control**

* Maintaining the integrity of the performance measurement baselines.
* Ensuring that changes to the product scope are reflected in the definition of the project scope.
* Coordinating changes across the entire project.
* Change control is necessary because projects seldom run exactly as planned.

**Close Project**

* This process involves performing the project closure portion of the project plan. The process includes finalizing all activities completed, formally close the project or project phase, and transfer the completed or cancelled project as appropriate.
* Two procedures are used in closing projects --- Administrative closure and Contract closure. Please refer to page 100 for details of these procedures.