

# Software Management Process Groups

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WEEK 4? LECTURE 7&8

# Today's Objective

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Discuss the Software Management Process Groups

- Initiating processes
- Planning processes
- Executing processes
- Monitoring and controlling processes
- Closing processes

# Project Management Process Groups

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- A **process** is a series of actions directed toward a particular result
- Project management can be viewed as a number of interlinked processes
- The project management process groups include:
  - Initiating processes
  - Planning processes
  - Executing processes
  - Monitoring and controlling processes
  - Closing processes

# Project Management Process Groups

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## Initiating Process Group

- Defines and authorizes the project or a project phase

## Planning Process Group

- Defines and refines objectives, and plans the course of action required to attain the objectives and scope that the project was undertaken to address

## Executing Process Group

- Integrates people and other resources to carry out the project management plan for the project.

# Project Management Process Groups

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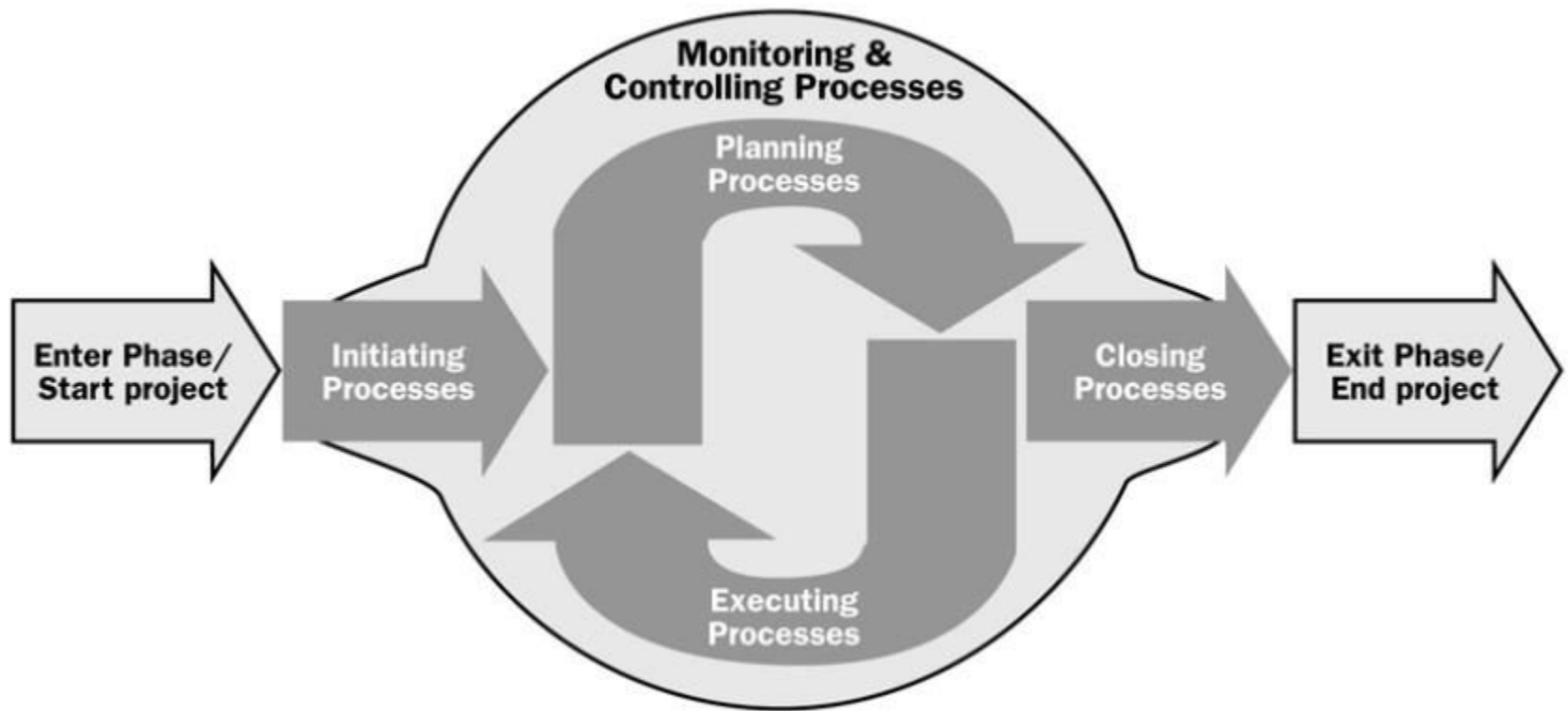
## Monitoring and Controlling Process Group

- Regularly measures and monitors progress to identify variances from the project management plan so that corrective action can be taken when necessary, to meet project objectives

## Closing Process Group

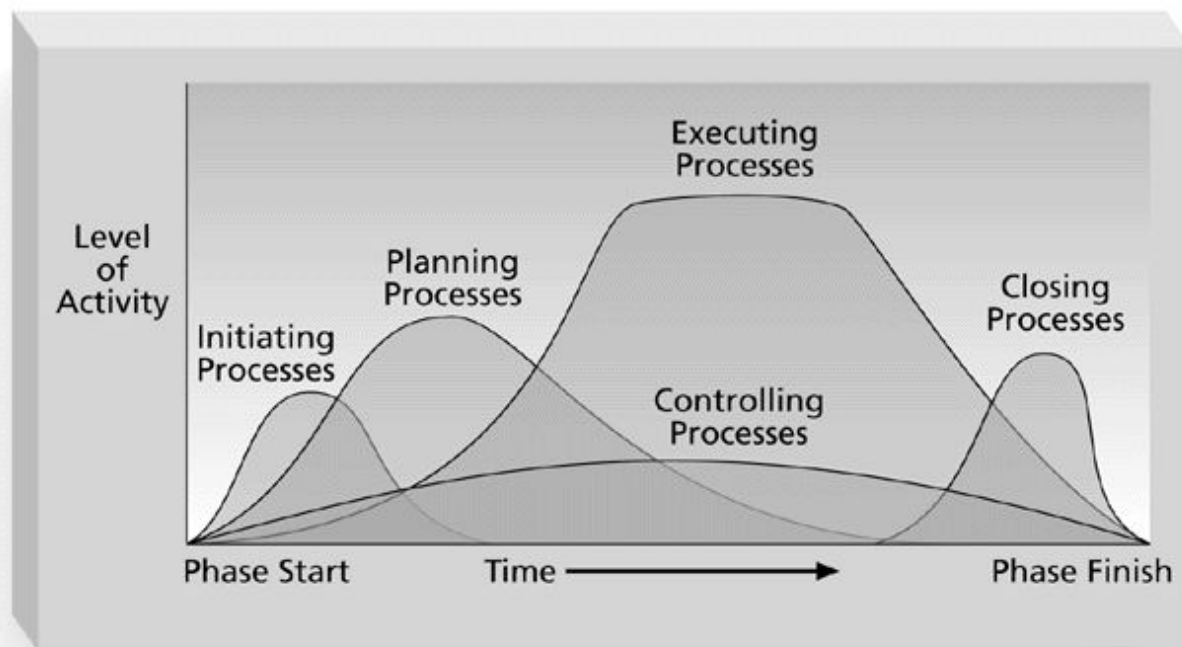
- Formalizes acceptance of the product, services or result and brings the project or a project phase to an orderly end.

# Project Management Process Groups



# Process Groups

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*Figure 2-5. Level of Process Group Activity Over Time*

## Developing an IT Project Management Methodology

- Just as projects are unique, so are approaches to project management
- Many organizations develop their own project management methodologies, especially for IT projects
- A **methodology** describes *how* things should be done; a **standard** describes *what* should be done



# Project Pre-Initiation

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It is good practice to lay the groundwork for a project before it officially starts

Senior managers often perform several pre-initiation tasks, including the following:

- Determine the scope, time, and cost constraints for the project
- Identify the project sponsor
- Select the project manager
- Develop a business case for a project
- Meet with the project manager to review the process and expectations for managing the project
- Determine if the project should be divided into two or more smaller projects

# Project Initiation

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- Initiating a project includes recognizing and starting a new project or project phase
- The main goal is to formally select and start off projects.

The main outputs are: Project Charter and Stakeholder Register

# Project Planning

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- The main purpose of project planning is to *guide execution*
- Every phase of project includes planning information
- Key outputs included in the project include:
  - A team contract
  - A project scope statement
  - A work breakdown structure (WBS)
  - A project schedule, in the form of a Gantt chart with all dependencies and resources entered
  - A list of prioritized risks (part of a risk register)

# Project Executing

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- Usually takes the most time and resources to perform project execution
- Project managers must use their leadership skills to handle the many challenges that occur during project execution
- Many project sponsors and customers focus on deliverables related to providing the products, services, or results desired from the project
- A milestone report can help focus on completing major milestones

# Project Monitoring and Controlling

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- Involves measuring progress toward project objectives, monitoring deviation from the plan, and taking correction actions
- Affects all other process groups and occurs during all phases of the project life cycle
- Outputs include performance reports, change requests, and updates to various plans

# Project Closing

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- Involves gaining stakeholder and customer acceptance of the final products and services
- Even if projects are not completed, they should be closed out to learn from the past
- Outputs include project archives and lessons learned, part of organizational process assets
- Most projects also include a final report and presentation to the sponsor/senior management

# Conclusion

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- We have discussed different software project management processes in this class.
- There are total 47 software project management processes which are further categorized in 5 process groups.

# Reading Assignment

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**Chapter 3: The Role of the Project Manager** by  
PMBOK-Guide-6th-Edition-PMI

(Book and Lecture Slides are already uploaded on resource link.)

**Resource Link:**



# Thank You

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