

PMP® V5 RDS

Project Management Processes

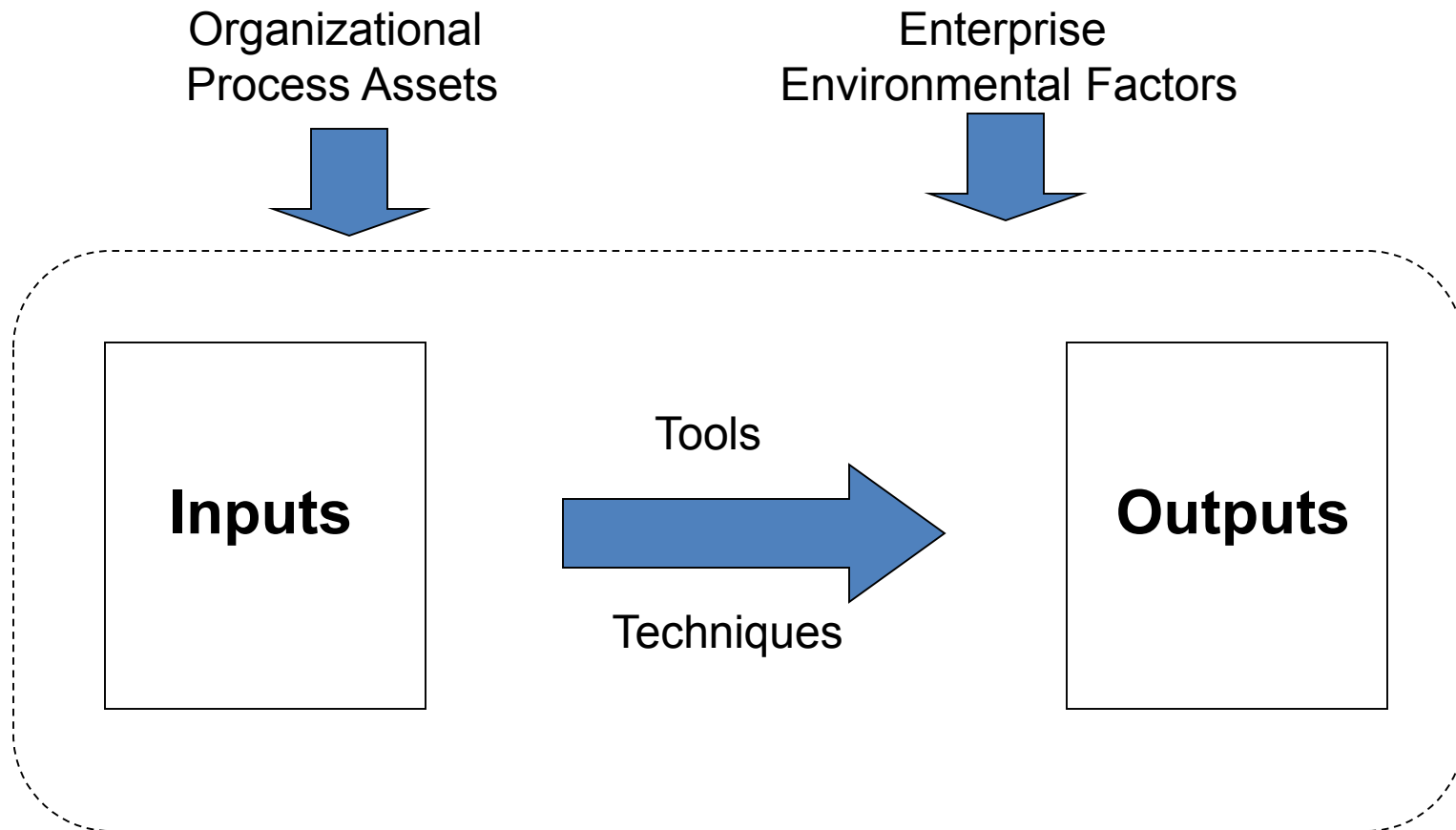
Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring and Controlling Process Group	Closing Process Group
4. Project Integration Management	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Work	4.4 Monitor and Control Project Work 4.5 Perform Integrated Change Control	4.6 Close Project or Phase
5. Project Scope Management		5.1 Plan Scope Management 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS		5.5 Validate Scope 5.6 Control Scope	
6. Project Time Management		6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate Activity Resources 6.5 Estimate Activity Durations 6.6 Develop Schedule		6.7 Control Schedule	
7. Project Cost Management		7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget		7.4 Control Costs	

8. Project Quality Management		8.1 Plan Quality Management	8.2 Perform Quality Assurance	8.3 Control Quality	
9. Project Human Resource Management		9.1 Plan Human Resource Management	9.2 Acquire Project Team 9.3 Develop Project Team 9.4 Manage Project Team		
10. Project Communications Management		10.1 Plan Communications Management	10.2 Manage Communications	10.3 Control Communications	
11. Project Risk Management		11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses		11.6 Control Risks	
12. Project Procurement Management		12.1 Plan Procurement Management	12.2 Conduct Procurements	12.3 Control Procurements	12.4 Close Procurements
13. Project Stakeholder Management	13.1 Identify Stakeholders	13.2 Plan Stakeholder Management	13.3 Manage Stakeholder Engagement	13.4 Control Stakeholder Engagement	

PMBOK Processes

- Process
 - A set of **interrelated actions** and activities performed to achieve a pre-specified product, result or service (unique project/service), characterized by ITTO:
 - Inputs
 - Tools and techniques
 - Outputs

Process



Organizational Process Assets

- The plans, processes, policies, procedures, and knowledge bases specific to and used by the performing organization
- Include
 - Any artifact, practice, or knowledge from any or all of the organizations
 - Formal and informal plans, processes, policies, procedures, and knowledge bases
 - Lessons learned and historical information
 - Completed schedules, risk data, and earned value data

Enterprise Environmental Factors

- Conditions, not under the control of the project team, that influence, constrain, or direct the project
- Include:
 - Organizational culture, structure, and governance
 - Geographic distribution of facilities and resources
 - Government or industry standards
 - Infrastructure
 - Existing human resources
 - Personnel administration
 - Company work authorization systems

Enterprise Environmental Factors

- Also include:
 - Marketplace conditions
 - Stakeholder risk tolerances
 - Political climate
 - Organization's established communications channels
 - Commercial databases
 - Project management information system

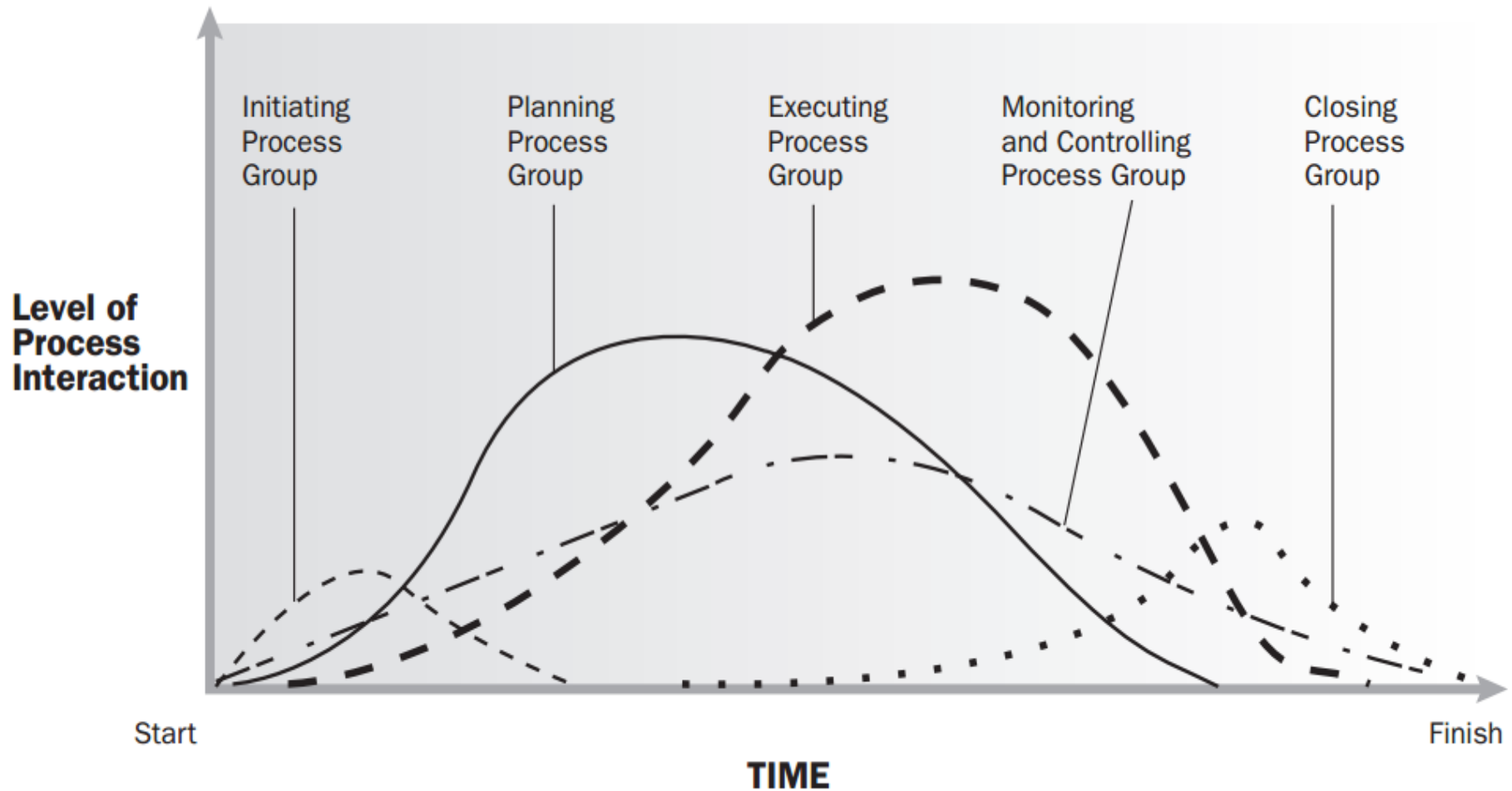
Processes

- **Project management processes:** ensure the effective flow of the project throughout its life cycle. These processes encompass the tools and techniques involved in applying the skills and capabilities described in the **Knowledge Areas**
 - Project management processes are generic
- **Product-oriented processes:** specify and create the project's product. Product oriented processes are typically **defined by the project life cycle** and **vary by application area** as well as the phase of the product life cycle.
 - Not a PMP exam topic

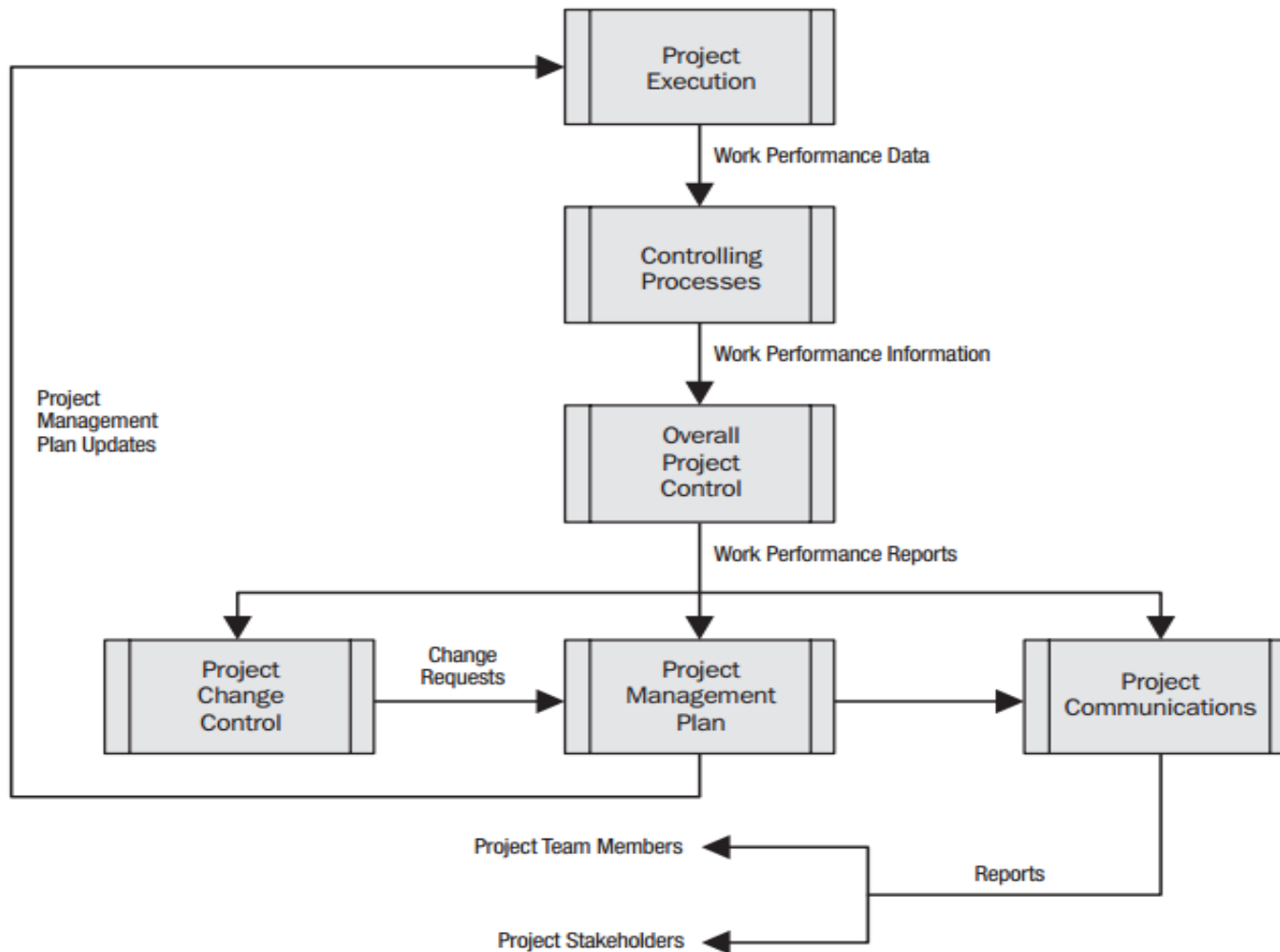
Process Groups

- **Initiating:** performed to define a new project or a new phase of an existing project by obtaining authorization to start the project or phase
- **Planning:** required to establish the scope of the project, refine the objectives, and define the course of action required to attain the objectives that the project was undertaken to achieve
- **Executing:** performed to complete the work defined in the project management plan to satisfy the project specifications
- **Monitoring and Controlling:** required to track, review, and regulate the progress and performance of the project; identify any areas in which changes to the plan are required; and initiate the corresponding changes
- **Closing:** performed to finalize all activities across all Process Groups to formally close the project or phase

Process Interaction



Project Information



Knowledge Areas

- A Knowledge Area represents a complete set of concepts, terms, and activities that make up a professional field, project management field, or area of specialization
- These ten Knowledge Areas are used on most projects most of the time

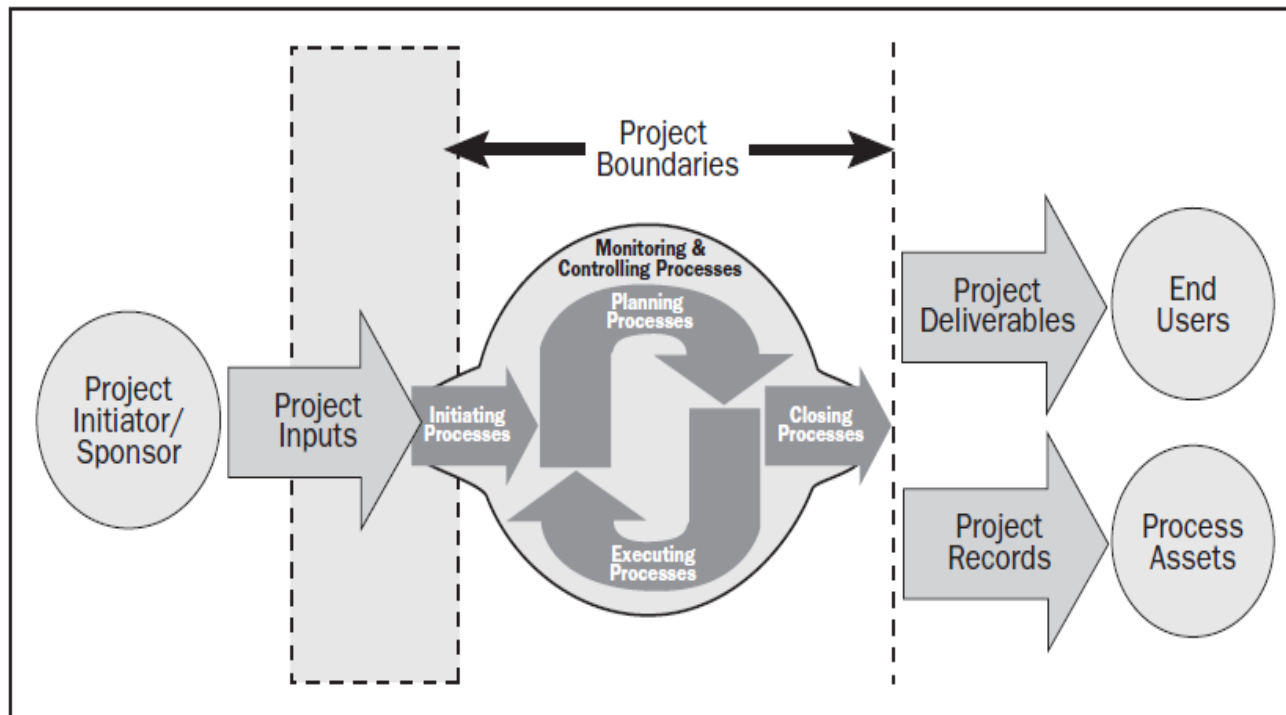
About Process Summary

- A simplified chart for getting a first impression of PMI processes
- How to use?
 - Knowing the new terms
 - Understanding the order of activities in initiating, planning, and closing are important
 - Using it to fill in the management tasks and deliverables as required in PMP exam application

Initiating

Initiating Process Group

- Processes for defining
 - A new project
 - A new phase of an existing project



Related Concepts

- Progressive Elaboration
 - Estimates, product scope, etc. are begun in the initiating process group and iterated or refined later in the planning process into plans
- Business Case
 - Includes project objectives
 - Justifies the existence of the project
- High Level Planning

Initiating (Process Summary)

- Select project manager
- Determine company culture and existing systems (Enterprise environmental factors, EEF)
- Collect processes, procedures and historical information (Organizational process assets, OPA)
- Divide large projects into phases
- Understand the business case
- Uncover initial requirements, assumptions, and risks
- Identify key deliverables to manage customer expectations and achieve project goals

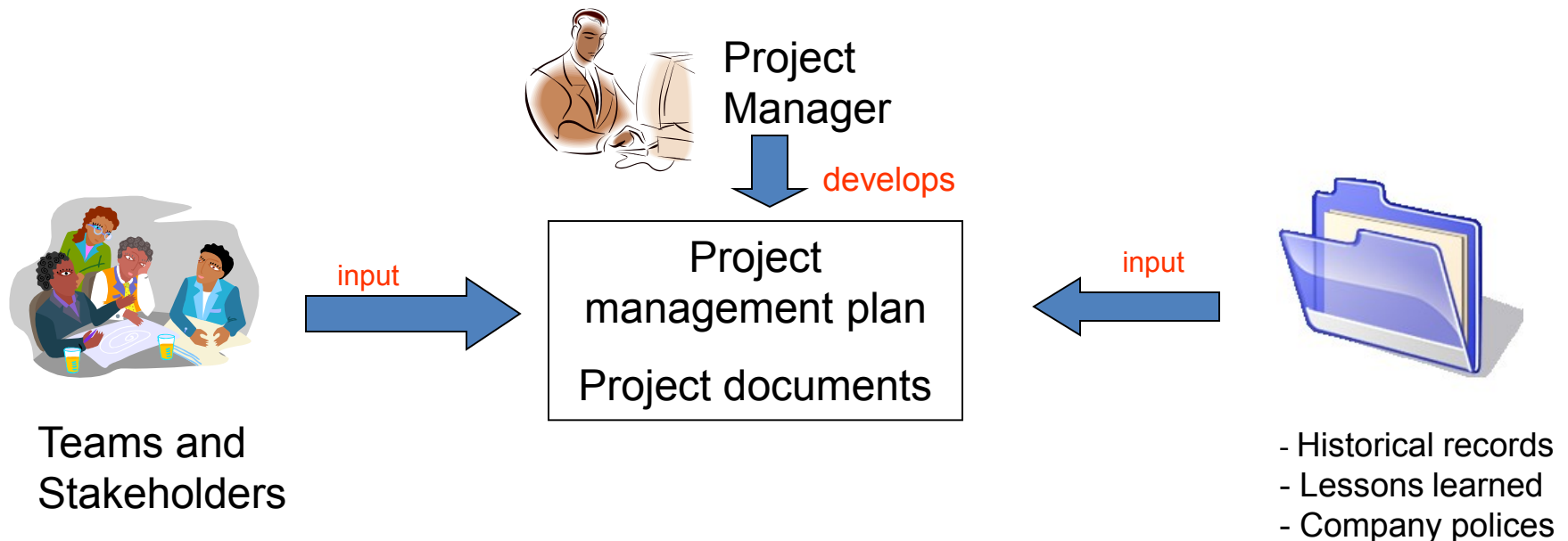
Initiating (Process Summary)

- Conduct benefit analysis to validate project alignment with organizational strategy and business value
- Create measurable objectives
- Develop project charter
- Identify stakeholders
- Develop stakeholder management strategy
- Inform stakeholders of the approved project charter to ensure common understanding
 - The order of the activities is **important** in the initiating process group.

Planning

Planning Process Group

- Organize the project before anything is actually done
- Gain formal approval of the plan
- Everyone should be involved in the planning processes



Sequence of Planning

- Stakeholder
- Scope
- Time
- Cost
- Quality
- Human Resources
- Communications
- Risk
- Procurement

13 Project Management Plans

- Change Management Plan
- Configuration Management Plan
- Requirements Management Plan
- Process Improvement Plan
- Stakeholder Management Plan
- Scope Management Plan
- Schedule Management Plan

13 Project Management Plans

- Cost Management Plan
- Quality Management Plan
- Human Resources Management Plan
- Communications Management Plan
- Risk Management Plan
- Procurement Management Plan

Planning (Process Summary)

- Plan for the preparation of project management plan
- Create stakeholder management plan
- Create Scope Management Plan
- Create Requirements Management Plan
- Collect, prioritize, and finalize requirements
- Create project scope statement
- Decide make or buy
- Determine the project management team (not the whole project team)
- Create WBS and WBS dictionary
- Create Schedule Management Plan
- Create Cost Management Plan

Planning (Process Summary)

- Create activity list
- Create network diagram
- Estimate activity resources
- Estimate activity durations and costs
- Determine critical path
- Develop schedule
- Determine budget
- Create Quality Management Plan
- Determine quality standards, processes and metrics
- Create Process Improvement Plan
- Create HR Management Plan
- Determine all roles and responsibilities

Planning (Process Summary)

- Create Communications Management Plan
- Create Risk Management Plan
- Perform risk identification, qualitative and quantitative risk analysis and risk response planning
- Go back – iterations
- Create Procurement Management Plan
- Prepare procurement documents

Planning (Process Summary)

- Create Change Management Plan
 - Create Configuration Management Plan
 - Determine performance measurement baselines
 - Develop Project Management Plan
 - Gain formal approval of the plan
 - Hold kickoff meeting
- The order of the activities is **important** in the planning process group.

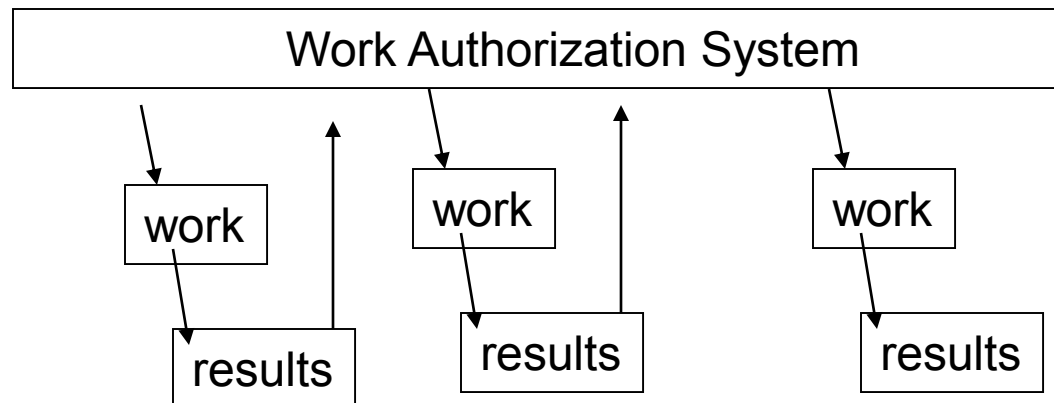
Executing

Executing Process Group

- Allows the project work to perform
- Executes the
 - Project management plan
 - Vendor management
 - Management of project implementation

Work Authorization System

- Allows work to be according to schedule and circumstances
- Provides verification of predecessor activities and the permission to begin successor activities



Executing (Process Summary)

- Execute the work according to the PM plan
- Produce product deliverables
- Request changes
- Implement only approved changes
- Ensure common understanding
- Use the work authorization system
- Continuously improve
- Follow processes
- Manage stakeholder engagement
- Perform quality assurance
- Acquire final team
- Manage project team

Executing (Process Summary)

- Evaluate team and project performance
- Hold team-building activities
- Give recognition and rewards
- Use issue logs
- Facilitate conflict resolution
- Send and receive information
- Hold meetings
- Manage the flow of information
- Maintain stakeholder relationships to receive continued support and manage expectations
- Conduct procurements
 - The order of these activities is **not** important

Monitoring and Controlling

Monitoring and Controlling Process Group

- Activities that ensure the project goes according to plan
- Actions to implement when the project is not going according to plan
- Validates project work and the response to the work
- Control predicted cost and schedule

Monitoring and Controlling (Process Summary)

- Take action to control the project
- Measure performance against the performance measurement baselines
- Measure performance against other metrics (product and quality) determined by the project manager
- Determine variances and if they warrant a change request
- Influence the factors that cause changes
- Request changes

Monitoring and Controlling (Process Summary)

- Control stakeholder engagement
- Perform integrated change control
- Approve or reject changes
- Inform stakeholders of approved changes
- Manage configuration
- Create forecasts
- Gain acceptance of interim deliverables from the customer (validate scope)

Monitoring and Controlling (Process Summary)

- Control quality
- Control communications
- Use lessons learned management techniques to enable continuous improvement
- Report performance
- Control risks
- Perform risk audits
- Manage reserves
- Control procurements
- Monitor procurement activities to verify compliance with project objectives
 - The order of these activities is **not** important

Closing

Closing Process Group

- Final, complete effort by the project manager, project team, stakeholders, and management
- Officially close the project or phrase
- Move onto other opportunities

Closing (Process Summary)

- Confirm work is done to requirements (OR decide to early terminate project)
- Close procurement
- Gain formal acceptance of the product
- Complete financial closure
- Complete final performance reporting
- Index and archive records
- Update lessons learned knowledge base
- Hand off completed product (OR incomplete product in case of project termination)
- Release resources
 - The order of the activities is **important** in the closing process group.

Exercise

- Determine high-level requirements and risks.
 - Initiating
- Implement approved changes, including corrective actions, preventive actions, and defect repair.
 - Executing
- Reanalyze existing risks.
 - Monitoring and controlling
- Create forecasts.
 - Monitoring and controlling
- Spend time trying to improve quality.
 - Executing

- Make sure the business case and the cost benefit analysis supporting the need for the project.
 - Initiating
- Evaluate the team's effectiveness as a team.
 - Executing
- Determine measurable project objectives and product objectives.
 - Initiating
- Manage the time and cost reserves.
 - Monitoring and controlling
- Increase the effectiveness of processes.
 - Executing

- Understand how the project fits into the organization's strategic objectives.
 - Initiating
- Identify high-level stakeholders, their influences, and their risk tolerances.
 - Initiating
- Determine variances.
 - Monitoring and controlling
- Add new skills acquired to team members' human resource records.
 - Closing

- Recommend changes to be handled in the Perform Integrated Change Control process.
 - Executing, Monitoring and controlling
- Keep managers apprised of when their resources will be needed on a project.
 - Executing
- Evaluate customer satisfaction.
 - Closing
- Validate and document that the project, or project phase, meets completion or exit criteria.
 - Closing
- Calculate estimate to complete.
 - Monitoring and controlling

- Create recommendations for the performing organization that increase its effectiveness.
 - Executing
- Recalculate how much the project will cost and how long it will take.
 - Monitoring and controlling
- Turn high-level stakeholder needs, wants, and expectations into requirements.
 - Initiating
- Look for newly arising risks.
 - Monitoring and controlling

- Obtain approval of changes in integrated change control.
 - Monitoring and controlling
- Determine if project activities comply with processes, policies, and procedures.
 - Executing
- Obtain formal acceptance of deliverables from the customer.
 - Monitoring and controlling (the process of validate scope)
- Determine what specifically will constitute project success.
 - Initiating
- Measure individual team member performance.
 - Executing

- Meet with managers to gain resource commitments.
 - Planning
- Use and interpret earned value calculations.
 - Monitoring and controlling
- Ensure common understanding of the work.
 - Executing
- Hold team-building activities.
 - Executing
- Define the product scope.
 - Initiating

- Which of the following is not performed during project initiating:
 - A. Identify and document business needs.
 - B. Create a project scope statement.
 - C. Divide large projects into phases.
 - D. Accumulate and evaluate historical information.

Answer: B

- Closure does not include which of following:
 - A. Determining performance measures.
 - B. Turning over the product of the project.
 - C. Documenting the degree to which each project phase was properly closed after its completion.
 - D. Updating the company's organizational process assets.

Answer: A

- Your team is involved in the Validate Scope process. What process group is the project in?
 - A. Planning
 - B. Closing
 - C. Executing
 - D. Monitoring and controlling

Answer: D

- Which of the following would be the MOST appropriate thing to do during the initiating process group?
 - A. Create a detailed description of the project deliverables.
 - B. Get familiar with the company culture and structure as it relates to the project.
 - C. Identify the root cause of problems.
 - D. Ensure all project management processes are complete.

Answer: B

- Which of the following would be the MOST appropriate thing to do during the monitoring and controlling process group?
 - A. Create a forecast.
 - B. Implement approved process improvements.
 - C. Use issue logs.
 - D. Determine if project activities comply with processes.

Answer: A

- All of the following occur during the planning process group EXCEPT:
 - A. Develop Project Charter.
 - B. Create WBS.
 - C. Estimate Costs.
 - D. Sequence Activities.

Answer: A

- Which of the following would be the MOST appropriate thing to do during the planning process group?
 - A. Update corporate processes and procedure based on lessons learned.
 - B. Evaluate the effectiveness of risk responses.
 - C. Recommend changes and defect repair.
 - D. Work with the customer to determine acceptance criteria.

Answer: D

- In order to complete the project initiating processes, a project manager needs the project charter and:
 - A. Identification of stakeholders.
 - B. A work breakdown structure.
 - C. A project scope statement.
 - D. A scope management plan.

Answer: A

- Company procedures require the creation of a lessons learned document. Which of the following is the BEST use of lessons learned?
 - A. Historical records for future projects
 - B. Planning record for the current project
 - C. Informing the team about what the project manager has done
 - D. Informing the team about the project management plan

Answer: A

- Which project management process group normally takes the MOST project time and resources?
 - A. Planning
 - B. Design
 - C. Integration
 - D. Executing

Answer: D

- Which process group authorizes the project?
 - A. Initiating
 - B. Planning
 - C. Executing
 - D. Monitoring and controlling

Answer: A

- The project sponsor has just signed the project charter. What is the NEXT thing to do?
 - A. Begin to complete work packages.
 - B. Validate Scope.
 - C. Start integrated change control.
 - D. Start to create management plans.

Answer: D

- The project is completed and the final deliverable has been sent to the customer, but the customer refuses to give final acceptance of the project. It is MOST important for the project manager to:
 - A. Inform management of the situation.
 - B. Ask the team for assistance.
 - C. Document the situation.
 - D. Initiate legal proceedings.

Answer: C

- Which of the following would be the MOST appropriate thing to do during the planning process group?
 - A. Review industry standards relevant to your project.
 - B. Develop closing procedure.
 - C. Look for positive and negative interactions from and to other projects that could affect your project.
 - D. Update the communications management plan based on late deliverables.

Answer: C

- Which statement about project deliverables is CORRECT?
 - A. They are determined after the work is completely defined.
 - B. They are described during project planning and improved over time.
 - C. They are defined at project onset with the input of project stakeholders.
 - D. They are determined by the project sponsor.

Answer: C

- Which of the following would be the MOST appropriate thing to do during the initiating process group?
 - A. Ensure the product scope is as final as practical.
 - B. Ensure continued understanding of the work.
 - C. Remove roadblocks.
 - D. Review bids and select sellers.

Answer: A

- When is the earliest time administrative closure should be completed?
 - A. At the end of each project phase
 - B. At the end of the project
 - C. Whenever a deliverable is complete
 - D. Whenever a new project manager takes over a project

Answer: A

- Which of the following would be the MOST appropriate thing to do during the monitoring and controlling process group?
 - A. Implement recognition and reward systems.
 - B. Obtain sign-off of the product of the project.
 - C. Issue performance reports.
 - D. Keep everyone focused on completing the project to the charter.

Answer: C

- The project schedule constraints have just been determined. What project management process group are you in?
 - A. Initiating
 - B. Planning
 - C. Executing
 - D. Monitoring and controlling

Answer: A

- Which of the following would be the MOST appropriate thing to do during the closing process group?
 - A. Work with the customer to determine acceptance criteria.
 - B. Collect historical information from previous projects.
 - C. Confirm all the requirements in the project have been met.
 - D. Gain formal approval of the management plans.

Answer: C

- Which of the following is a characteristic of project management processes?
 - A. Iterative
 - B. Unique
 - C. Unnecessary
 - D. Standardized

Answer: A

- In which process group does the team measure and analyze the work being done on the project?
 - A. Initiating
 - B. Executing
 - C. Monitoring and controlling
 - D. Closing

Answer: C

The End