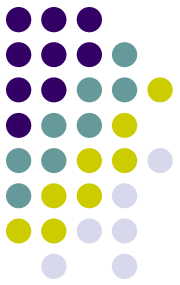# Chapter 2
The Organization and Process

2.1. The Organization

* <u>Understanding Organizations</u>

|	
Structural frame: Focuses on roles and responsibilities, coordination and control. Organizational charts help define this frame.	**Human resources frame:** Focuses on providing harmony between needs of the organization and needs of people.
Political frame: Assumes organizations are coalitions composed of varied individuals and interest groups. Conflict and power are key issues.	**Symbolic frame:** Focuses on symbols and meanings related to events. Culture is important.

Project managers must learn to work within all four organizational frames to function well in organization.

* **Many Organizations Focus on the Structural Frame**

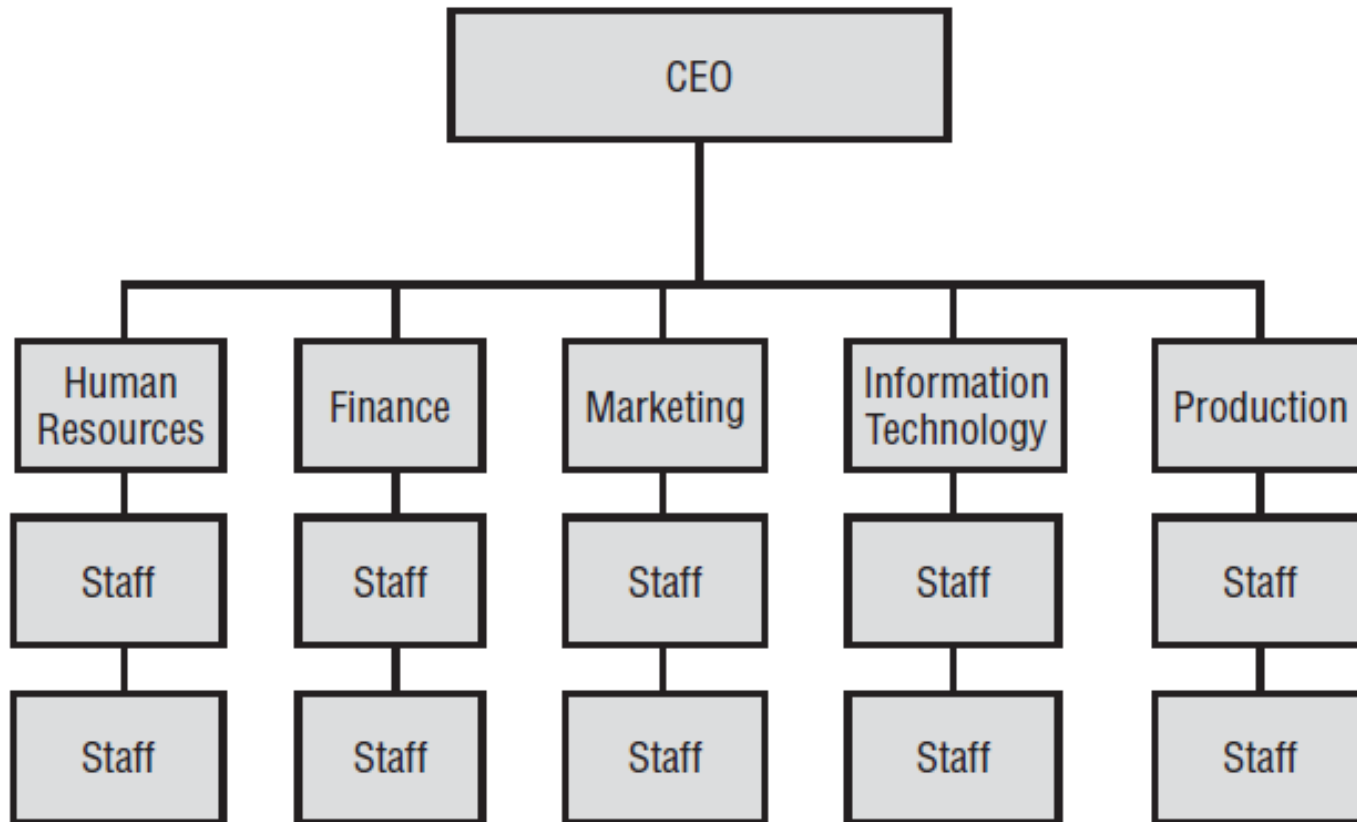- 3 basic organizational structures
  - functional
  - project
  - matrix

Functional
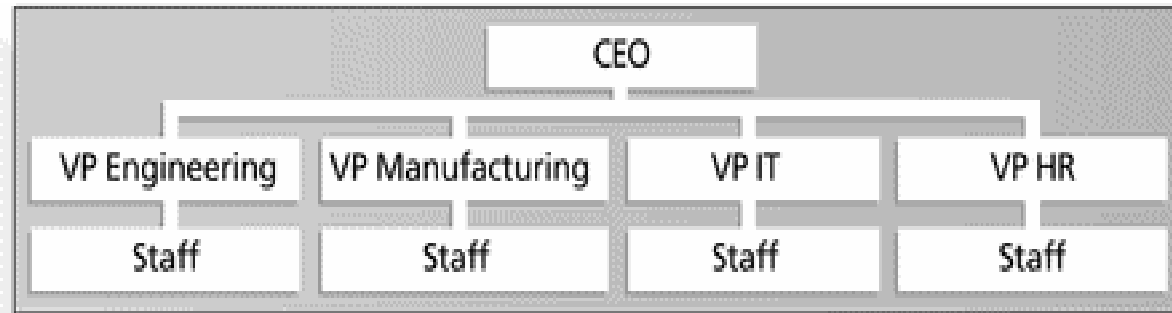
* **Many Organizations Focus on the Structural Frame**
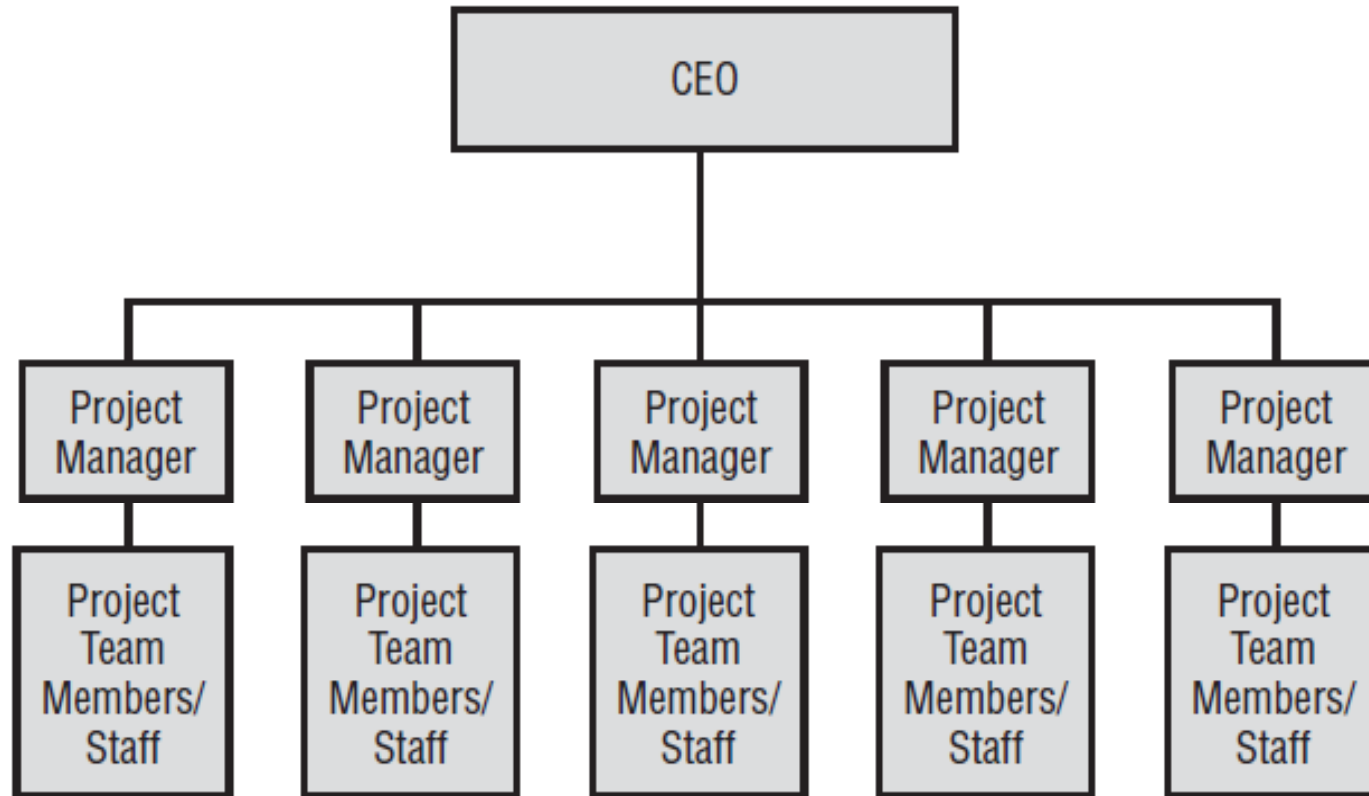
Functional
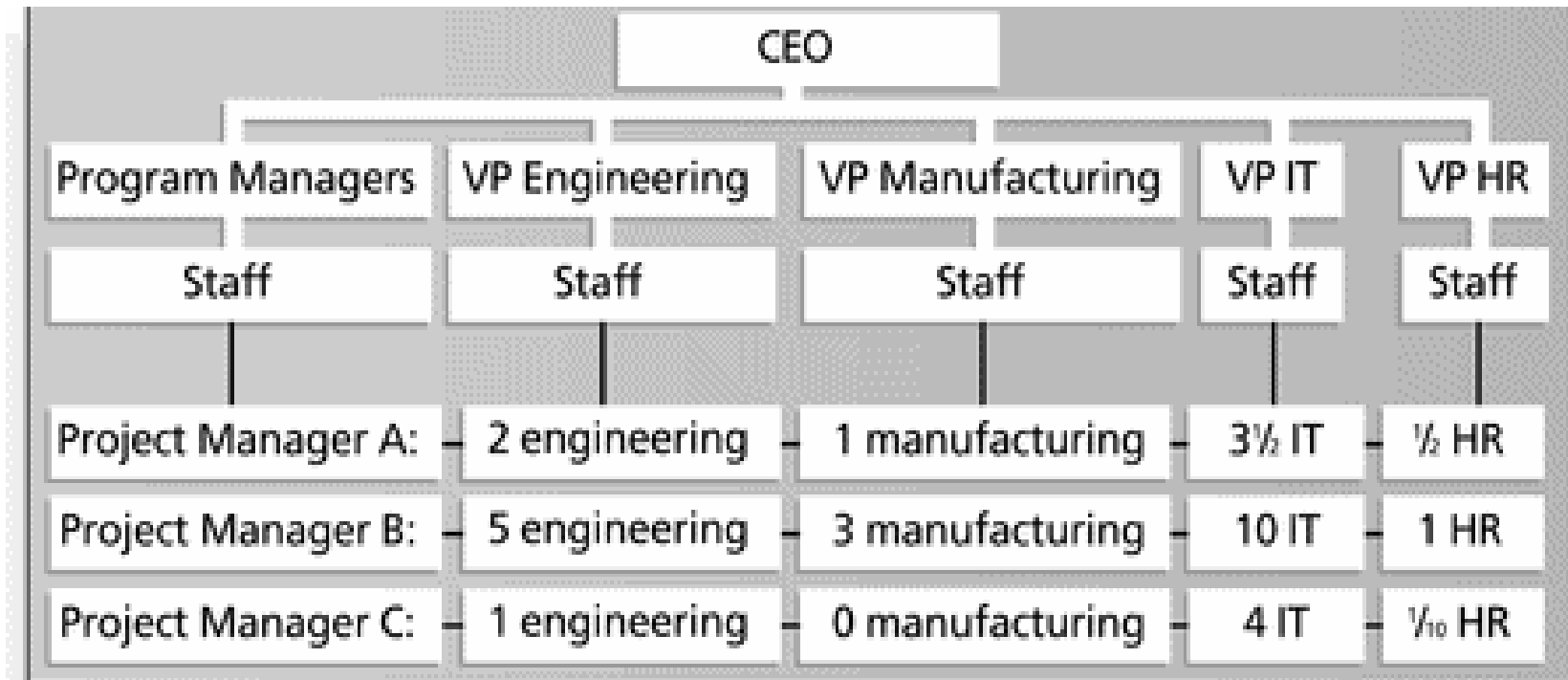
* Many Organizations Focus on the Structural Frame

Project
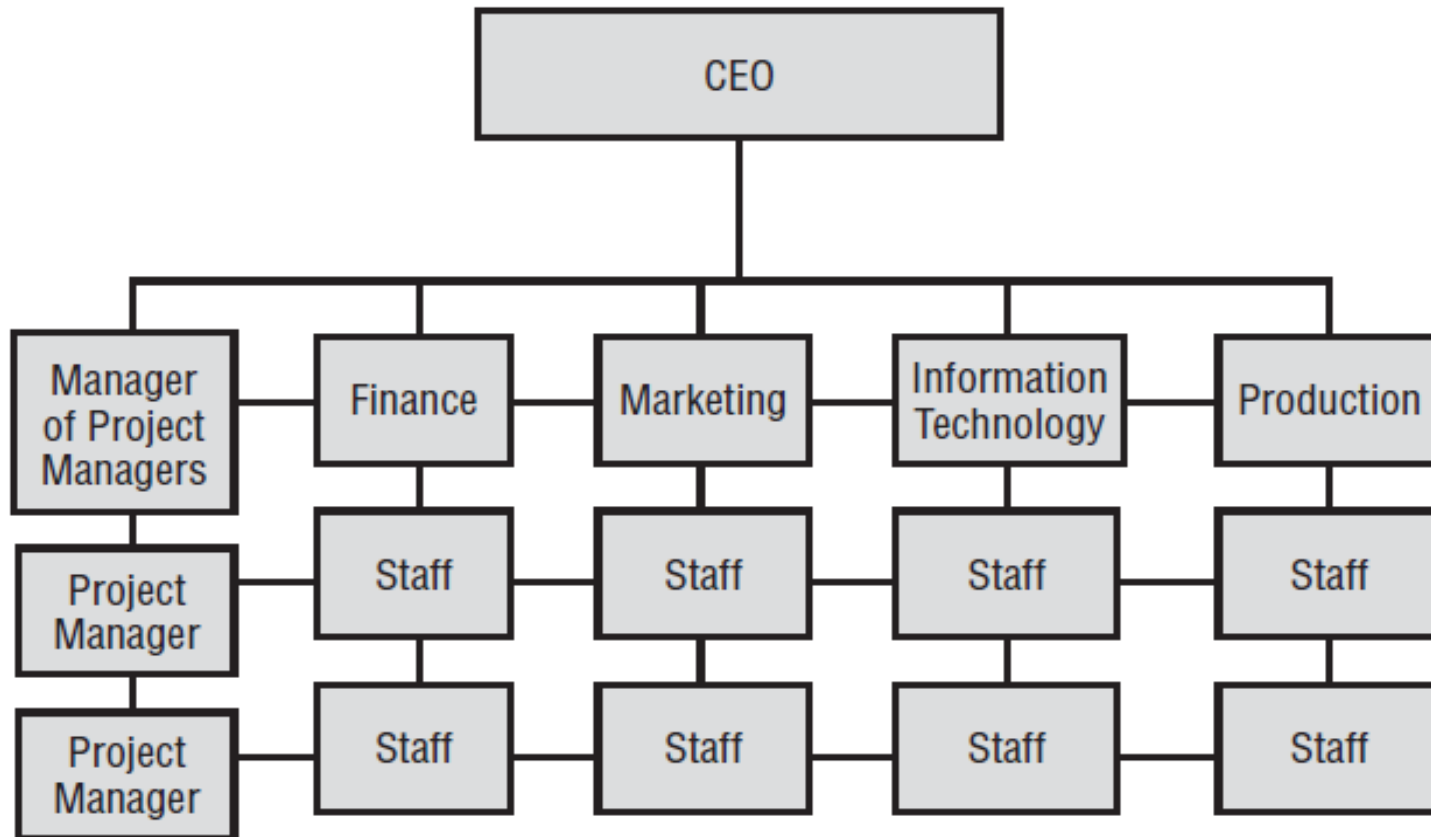
```
                    ┌─────────────────┐
                    │       CEO       │
                    └─────────────────┘
                            │
    ┌─────────┬─────────────┼─────────────┬─────────┐
┌─────────┐ ┌─────────┐ ┌─────────┐ ┌─────────┐ ┌─────────┐
│ Project │ │ Project │ │ Project │ │ Project │ │ Project │
│ Manager │ │ Manager │ │ Manager │ │ Manager │ │ Manager │
└─────────┘ └─────────┘ └─────────┘ └─────────┘ └─────────┘
     │           │           │           │           │
┌─────────┐ ┌─────────┐ ┌─────────┐ ┌─────────┐ ┌─────────┐
│ Project │ │ Project │ │ Project │ │ Project │ │ Project │
│  Team   │ │  Team   │ │  Team   │ │  Team   │ │  Team   │
│Members/ │ │Members/ │ │Members/ │ │Members/ │ │Members/ │
│  Staff  │ │  Staff  │ │  Staff  │ │  Staff  │ │  Staff  │
└─────────┘ └─────────┘ └─────────┘ └─────────┘ └─────────┘
```

* <u>Many Organizations Focus on the Structural Frame</u>

<u>Matrix (➡)</u>

	CEO			
Program Managers	VP Engineering	VP Manufacturing	VP IT	VP HR
Staff	Staff	Staff	Staff	Staff
Project Manager A:	2 engineering	1 manufacturing	3½ IT	½ HR
Project Manager B:	5 engineering	3 manufacturing	10 IT	1 HR
Project Manager C:	1 engineering	0 manufacturing	4 IT	1/10 HR

* **Many Organizations Focus on the Structural Frame**

Strong Matrix

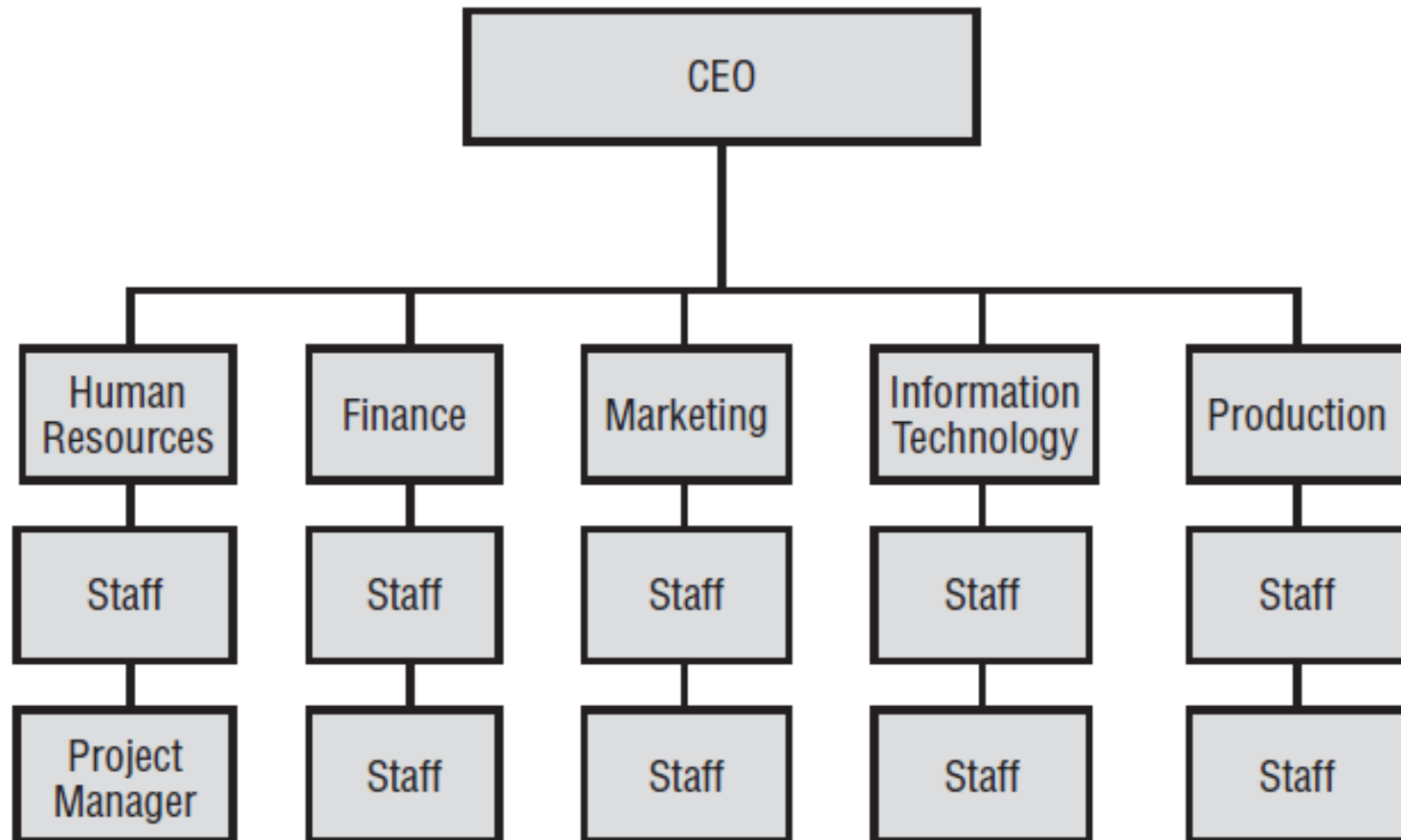# * Many Organizations Focus on the Structural Frame

Weak Matrix
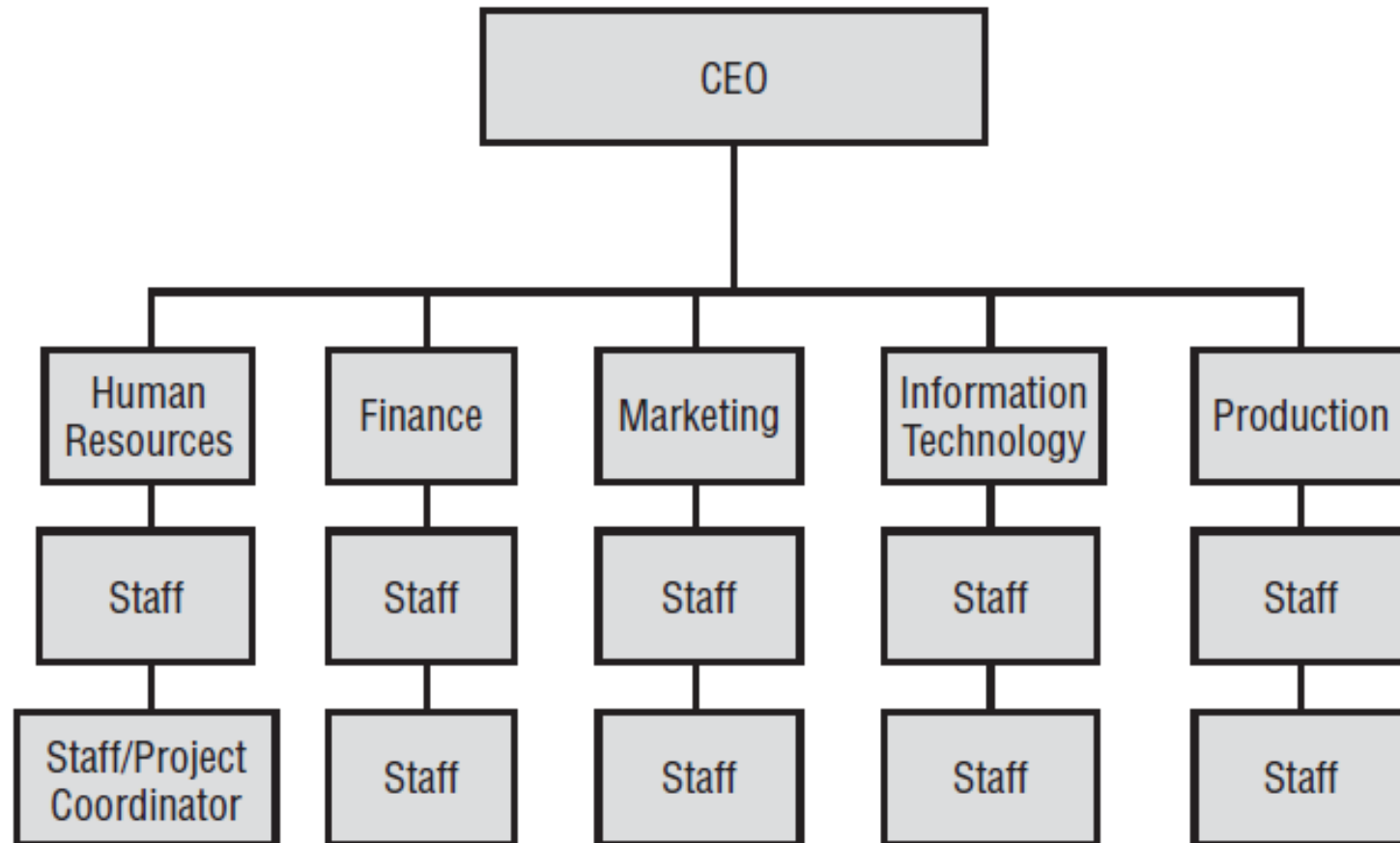
* Many Organizations Focus on the Structural Frame

Balanced Matrix

# * **Many Organizations Focus on the Structural Frame**

Comparing Matrix Structure

	Weak Matrix	Balanced Matrix	Strong Matrix
Project Manager's Title:	Project coordinator, project leader, or project expeditor	Project manager	Project manager
Project Manager's Focus:	Split focus between project and functional responsibilities	Projects and project work	Projects and project work
Project Manager's Power:	Minimal authority and power	Balance of authority and power	Significant authority and power
Project Manager's Time:	Part-time on projects	Full-time on projects	Full-time on projects
Organization Style:	Most like functional organization	Blend of both weak and strong matrix	Most like a projectized organization
Project Manager Reports To:	Functional manager	A functional manager, but shares authority and power	Manager of project managers

* **Suggested Skills for Project Managers**
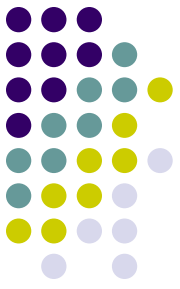
- Project managers need a wide variety of skills

- They should be comfortable with change, understand the organizations they work in and with, and be able to lead teams to accomplish project goals

- Project managers need both "hard" and "soft" skills. Hard skills include product knowledge and knowing how to use various project management tools and techniques, and soft skills(or human relations skills) include being able to work with various types of people

* Suggested Skills for Project Managers

- Communication skills: listening, persuading

- Organizational skills: planning, goal-setting, analyzing

- Team Building skills: empathy, motivation, esprit de corps

- Leadership skills: set examples, be energetic, have vision (big picture), delegate, be positive

- Coping skills: flexibility, creativity, patience, persistence

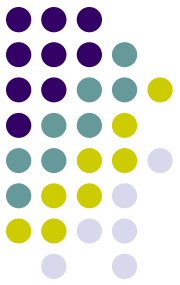- Technological skills: experience, project knowledge

* Fifteen Project Management Job Functions

1) Define scope of project
2) Identify stakeholders, decision-makers
3) Develop detailed task list (work breakdown structures)
4) Estimate time requirements
5) Develop initial project management flow chart
6) Identify required resources and budget
7) Evaluate project requirements

8) Identify and evaluate risks
9) Prepare contingency plan
10) Identify interdependencies
11) Identify and track critical milestones
12) Participate in project phase review
13) Secure needed resources
14) Manage the change control process
15) Report project status

* Most Significant Characteristics of Effective and Ineffective Project Managers
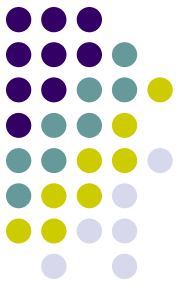
Effective Project Managers	Ineffective Project Managers
• Lead by example	• Set bad examples
• Are visionaries	• Are not self-assured
• Are technically competent	• Lack technical expertise
• Are decisive	• Are poor communicators
• Are good communicators	• Are poor motivators
• Are good motivators	
• Stand up to upper management when necessary	
• Support team members	
• Encourage new ideas	

2.2. The Process

* <u>Project Phases and the Project Life Cycle</u>
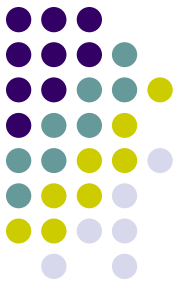
- A project life cycle is a collection of project phases

- Project phases vary by project or industry, but some general phases include

  - concept
  - development

  } focus on planning and are often referred to as project feasibility

  - implementation
  - support or close-out

  } focus on delivering the actual work and are often referred to as project acquisition
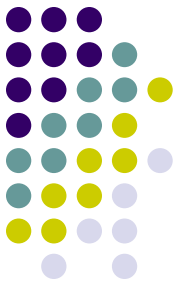
* Phases of the Project Life Cycle
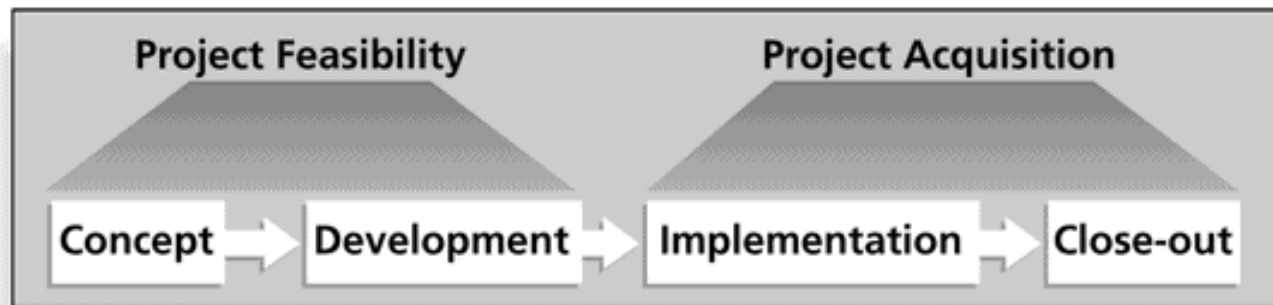
|	Concept	Development	Implementation	Close-out
Project Feasibility			**Project Acquisition**	
Sample deliverables for each phase	Management plan	Project plan	Last work package	Completed work
	Preliminary cost estimate	Budgetary cost estimate	Definitive cost estimate	Lessons learned
	3-level WBS	6+-level WBS	Performance reports	Customer acceptance

* **Project Management Process Groups**

- A process is a series of actions directed toward a particular result

- Project management process groups progress from initiation activities to planning activities, executing activities, controlling activities, and closing activities.

- Each process is described by:
  - Inputs
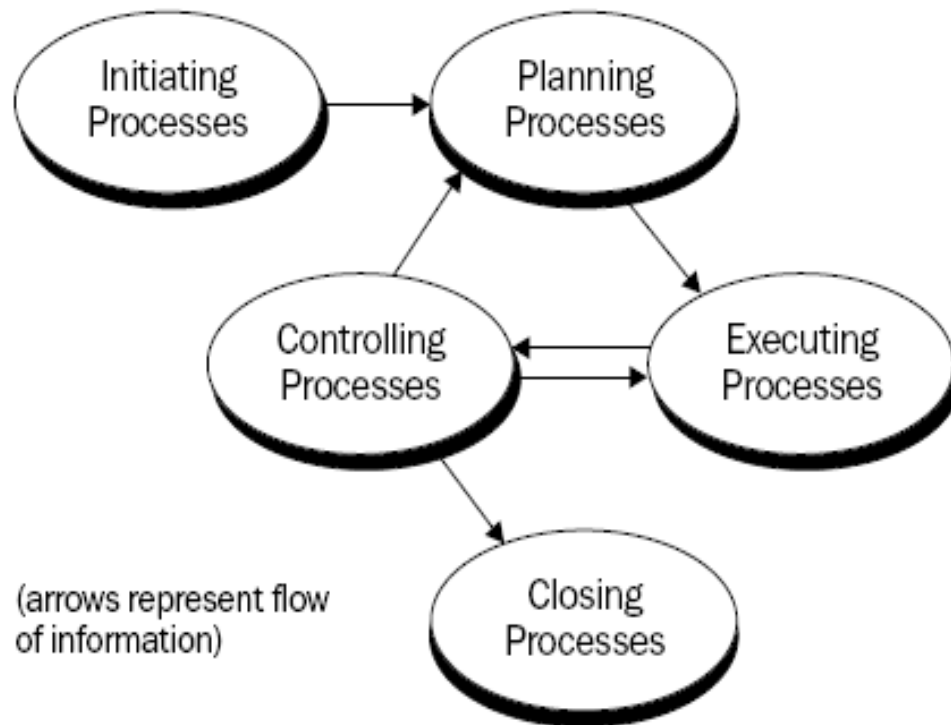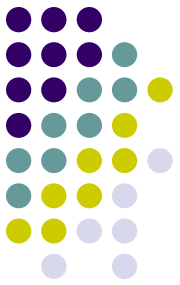 - Tools and techniques
  - Outputs

Figure 2.1. Overlap of Process Groups in a Phase (PMBOK® Guide, 2000, p. 31)
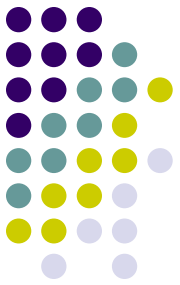
* Process Links

(arrows represent flow of information)
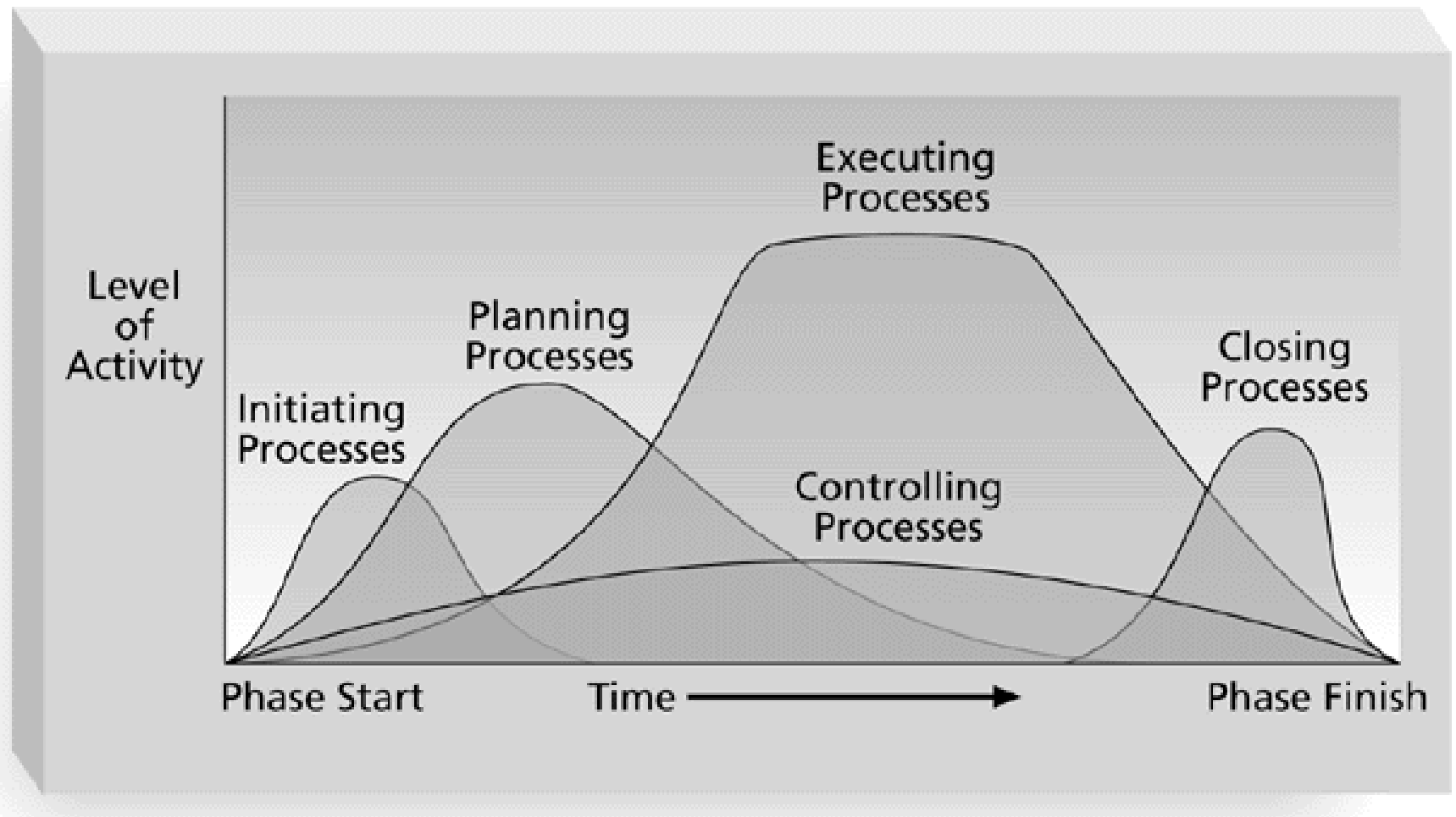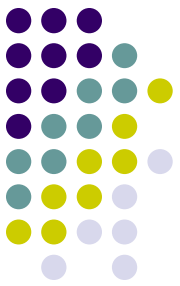
* Characteristics of the Project Process Groups

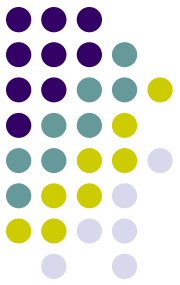|	Initiating	Planning	Executing	Monitoring and Controlling	Closing
Costs	Low	Low	Highest	Lower	Lowest
Staffing Levels	Low	Lower	High	High	Low
Chance for Successful Completion	Lowest	Low	Medium	High	Highest
Stakeholder Influence	Highest	High	Medium	Low	Lowest
Risk Probability	Lowest	Low	High	High	Lower

1) Project Initiation or Initiating Processes

- Initiating a project includes recognizing and starting a new project or project phase

- The main goal is to formally select and start off projects

- Key outputs include:

  - Assigning the project manager

  - Identifying key stakeholders

  - Completing a business case (➡)

  - Completing a project charter and getting signatures on it
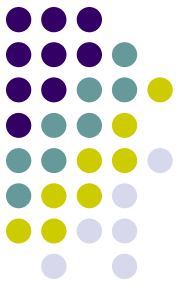
2) Project Planning or Planning Processes

- The main purpose of project planning is to *guide execution*

- Every knowledge area includes planning information (➡)

- Key outputs include:

  - A team contract

  - A 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
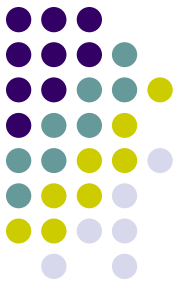
3) Project Executing or Executing Processes

- It usually takes the most time and resources to perform project execution since the products of the project are produced here

- The most important output of execution is work results

- Project managers must use their leadership skills to handle the many challenges that occur during project execution

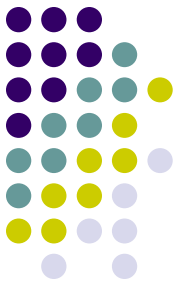# 4) Project Controlling or Controlling Processes

- Controlling involves measuring progress toward project objectives, monitoring deviation from the plan, and taking corrective actions

- Controlling affects all other process groups and occurs during all phases of the project life cycle

- Status and progress reports are important outputs of controlling

5) Project Closing or Closing Processes

- The closing process involves gaining stakeholder and customer acceptance of the final product and bringing the project, or project phase, to an orderly end

- Even if projects are not completed, they should be closed out to learn from the past

- Project archives and lessons learned are important outputs. Most projects include a final report and presentations

Relationships Among Process Groups and Knowledge Areas

Knowledge Area	Project Process Groups				
	INITIATING	PLANNING	EXECUTING	CONTROLLIN	CLOSING
Integration		Project plan development	Project plan execution	Integrated change control	
Scope	Initiation	Scope planning		Scope verification	
		Scope definition		Scope change control	
Time		Activity definition		Schedule control	
		Activity sequencing			
		Activity duration estimating			
		Schedule development			
Cost		Resource planning		Cost control	
		Cost estimating			
		Cost budgeting			
Quality		Quality planning	Quality assurance	Quality control	

Human resources		Organizational planning	Team development		
		Staff acquisition			
Communications		Communications planning	Information distribution	Performance reporting	Administrative closure
Risk		Risk management planning		Risk monitoring and control	
		Risk identification			
		Qualitative risk analysis			
		Quantitative risk analysis			
		Risk response planning			
Procurement		Procurement planning	Solicitation		Contract close-out
		Solicitation planning	Source selection		

Questions
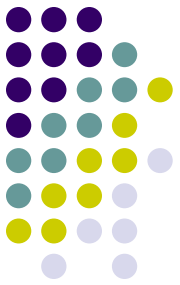
Please read the following items:

1- Understanding organization

2- Suggested skills for project managers

3- Project management job function

4- Most significant characteristics of effective and ineffective project managers

5- Project management process group

Business Case (⬅)

- A business case is a document which justifies the start-up of a project. It includes:
  - a description of the problem or opportunity that exists in the business;
  - a list of the available options for delivering a solution to resolve the problem;
  - a list of the costs and benefits associated with each solution option;
  - a description of the preferred solution.