

The Project Management Process Groups

Learning Objectives

- Describe the five project management (PM) process groups, the typical level of activity for each, and the interactions among them.
- Understand how the PM process groups relate to the PM knowledge areas.
- Discuss how organizations develop information technology PM methodologies to meet their needs.

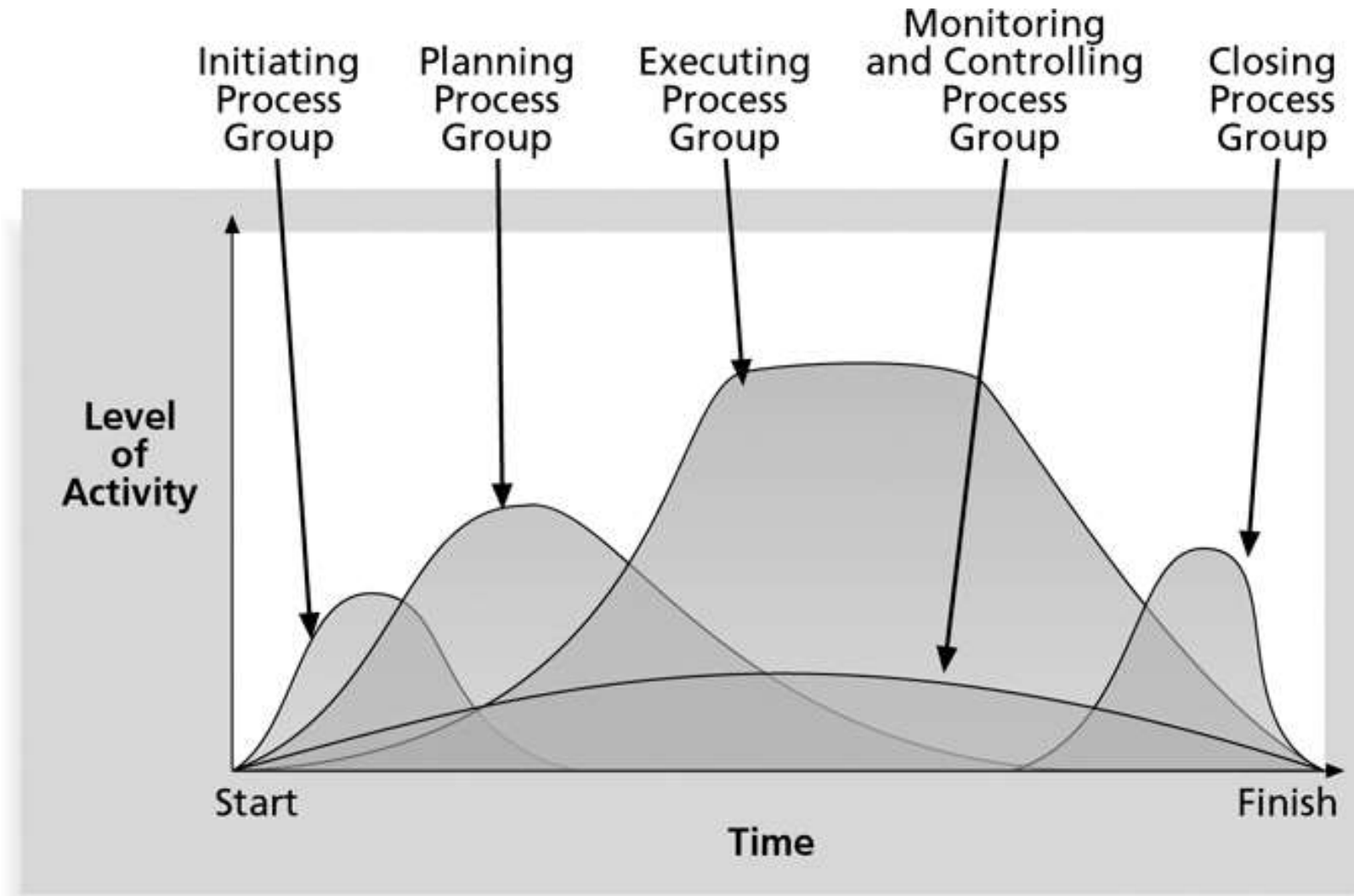
Learning Objectives

- Apply the PM process groups to manage an information technology project, and understand the contribution that effective project initiation, project planning, project execution, project monitoring and controlling, and project closing make to project success.

Project Management Process Groups

- A **process** is a series of actions directed toward a particular result.
- Project management can be viewed as a number of interlinked processes.

Level of Activity and Overlap of Process Groups Over Time



Initiating Processes

- Defining and authorizing a project or project phase
- Define the business need for the project, sponsor, project manager

Planning Processes

- Devising and maintaining a workable scheme to ensure that the project address the organization's needs.
- There is no single project plan such as the scope management plan, schedule management plan
- Defining each knowledge area as it relates to the project
 - The work needs to be done
 - Schedule activities
 - Cost estimate
 - Resources to procure

Executing Processes

- Coordinating people and other resources to
 - carry out the project plans
 - produce the products, services, or results

Monitoring and Controlling Processes

- Measuring and monitoring progress to ensure that the project team meets the project objectives.
 - Measure progress against the plans
 - Common monitoring and controlling process is performance reporting

Closing Processes

- Formalizing acceptance of the project or project phase and ending it efficiently.
- Administrative activities are often involved in this process group
 - Archiving project files
 - Closing out contracts
 - Documenting lessons learned
 - Receiving formal acceptance

Process Groups Outcomes

- Initiating processes
 - The organization recognizes that a new project exists – completion of a business case and project charter
- Planning processes
 - Completing the WBS and scope statement, project schedule and cost estimate
- Executing processes
 - Performing actions necessary to complete the work described in the planning activities
- Monitoring and controlling processes
 - Measuring progress toward the project objectives, monitoring deviation from the plan and taking corrective action to match progress with the plan
- Closing processes
 - Formal acceptance of the work and creation of closing documents

Project Process

- Level of activity and length of each process group varies for every product
- On the average:
 - Executing process requires 50-60% of the resources and time
 - The planning process requires about 15-25%
 - The initiating and closing processes are usually the shortest and require the least amount of resources, usually 5 -10% each
 - Monitoring and controlling is done throughout the project and generally takes 5-15%

Table 3-1. Relationships Among Process Groups and Knowledge Areas

KNOWLEDGE AREA	PROJECT MANAGEMENT PROCESS GROUPS				
	INITIATING	PLANNING	EXECUTING	MONITORING & CONTROLLING	CLOSING
<i>Project Integration Management</i>	Develop project charter, Develop preliminary project scope statement	Develop project management plan	Direct and manage project execution	Monitor and control project work, Integrated change control	Close project
<i>Project Scope Management</i>		Scope planning, Scope definition, Create WBS		Scope verification, Scope control	
<i>Project Time Management</i>		Activity definition, Activity sequencing, Activity resource estimating, Activity duration estimating, Schedule development		Schedule control	
<i>Project Cost Management</i>		Cost estimating, Cost budgeting		Cost control	

PMBOK® Guide 2004, p. 69

Table 3-1. Relationships Among Process Groups and Knowledge Areas (cont'd)

KNOWLEDGE AREA	PROJECT MANAGEMENT PROCESS GROUPS				
	INITIATING	PLANNING	EXECUTING	MONITORING & CONTROLLING	CLOSING
<i>Project Quality Management</i>		Quality planning	Perform quality assurance	Perform quality control	
<i>Project Human Resource Management</i>		Human resource planning	Acquire project team, Develop project team	Manage project team	
<i>Project Communications Management</i>		Communications planning	Information distribution	Performance reporting, Manage stakeholders	
<i>Project Risk Management</i>		Risk management planning, Risk identification, Qualitative risk analysis, Quantitative risk analysis, Risk response planning		Risk monitoring and control	
<i>Project Procurement Management</i>		Plan purchases and acquisitions, Plan contracting	Request seller responses, Select sellers	Contract administration	Contract closure

PMBOK® Guide 2004, p. 69

Project Charter

- Project charter is a document that formally recognizes the existence of a project and provides a direction on the project's objectives and management.
- Purpose of the Project Charter
 - Document the project objectives
 - Define project infrastructure
 - Summarize details of project plan
 - Define roles and responsibilities
 - Show explicit commitment to project
 - Set out project control mechanisms

Project Stakeholders

- Individuals and Organizations
 - Interested in the projects
 - May be affected by the project execution
 - May exert influence on project (positive & negative)
- Project Management team must
 - Identify stake holders
 - Determine their requirements and expectations
 - Assess their knowledge and skills
 - Manage their expectation and their influences
 - Conflicting expectations should be resolved in favor of customer.

Key Stakeholders

Customer / User	Person or Organization that will use the result of the project. Customer and users may be different entities.
Sponsor	The person or group that provides financial resources for the project
Portfolio Managers/Portfolio Review board	Responsible for governing the project within the portfolio. Review the projects return on investment, value, alignment, etc.
Program Managers	Responsible for managing related projects in coordinated manner to obtain benefits. Provide guidance and support to the project managers within their program
Project Management Office	PMO can be a stakeholder if it has direct or indirect responsibility for the outcome of the project.

Key Stakeholders

Project Manager	The person responsible for managing the project.
Project Team	Individuals from different groups with specific subject matter knowledge or skill who carry out the work of the project.
Functional Managers	May provide the subject matter expertise to the project
Operation Management	Involved in the handoff of the project deliverables to ongoing operations.
Sellers/ Business Partners	Have a contractual arrangement to provide a service related to the project.

Cultures and Styles

- Organizational Culture is reflected in many aspects
 - Shared values, norms, beliefs, expectation
 - Policies, rules and procedures.
 - The perception of the authority relationships
 - Ethics
 - Working Schedule
 - Dressing Style
- Organizational Culture can impact the project
 - Attitude on risk
 - Management style

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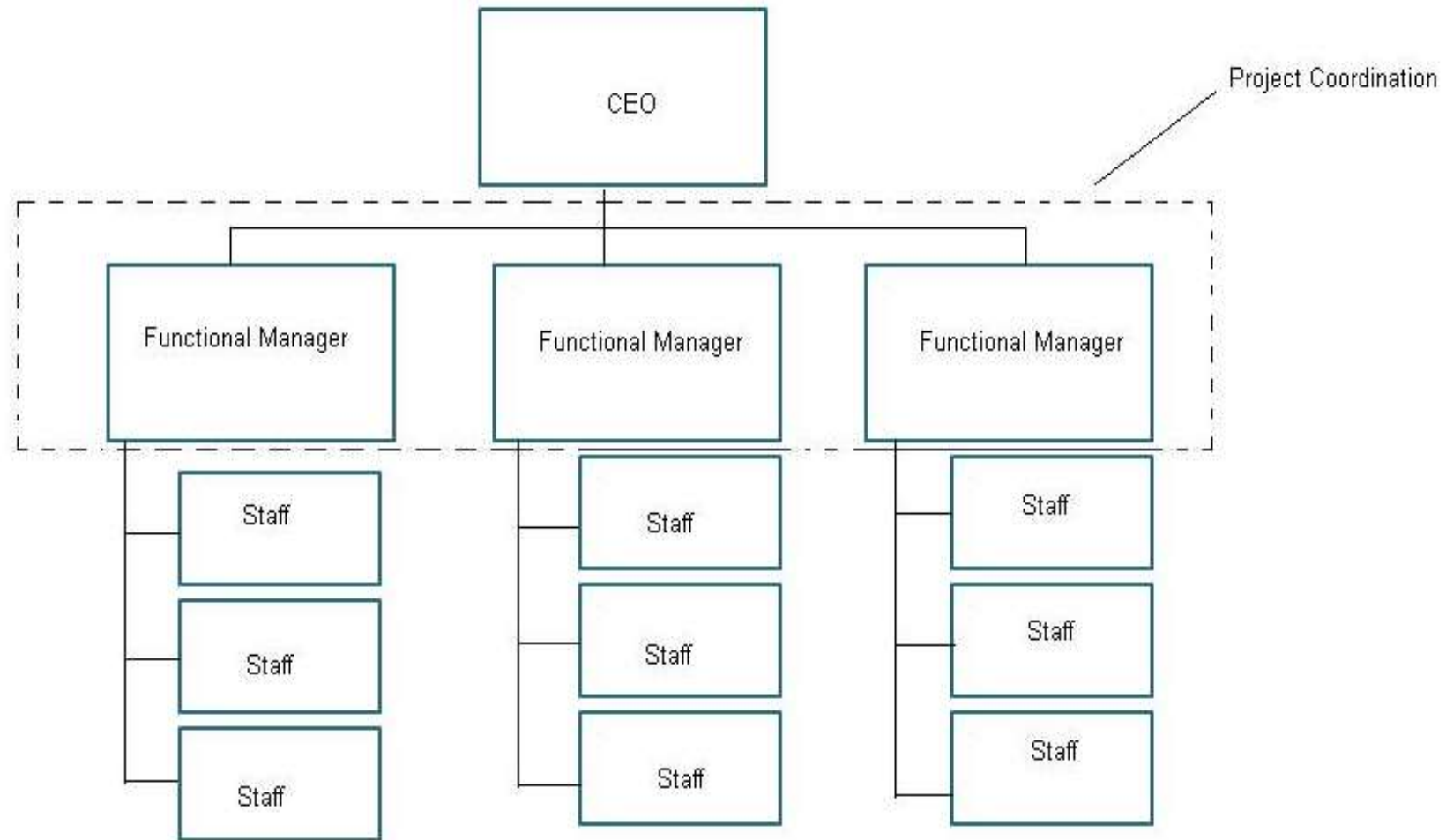
Organizational Structures

- Functional
- Matrix
 - Weak Matrix
 - Balance Matrix
 - Strong Matrix
- Projectized

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Functional Organization



Green boxes : Staff involved in Project Work

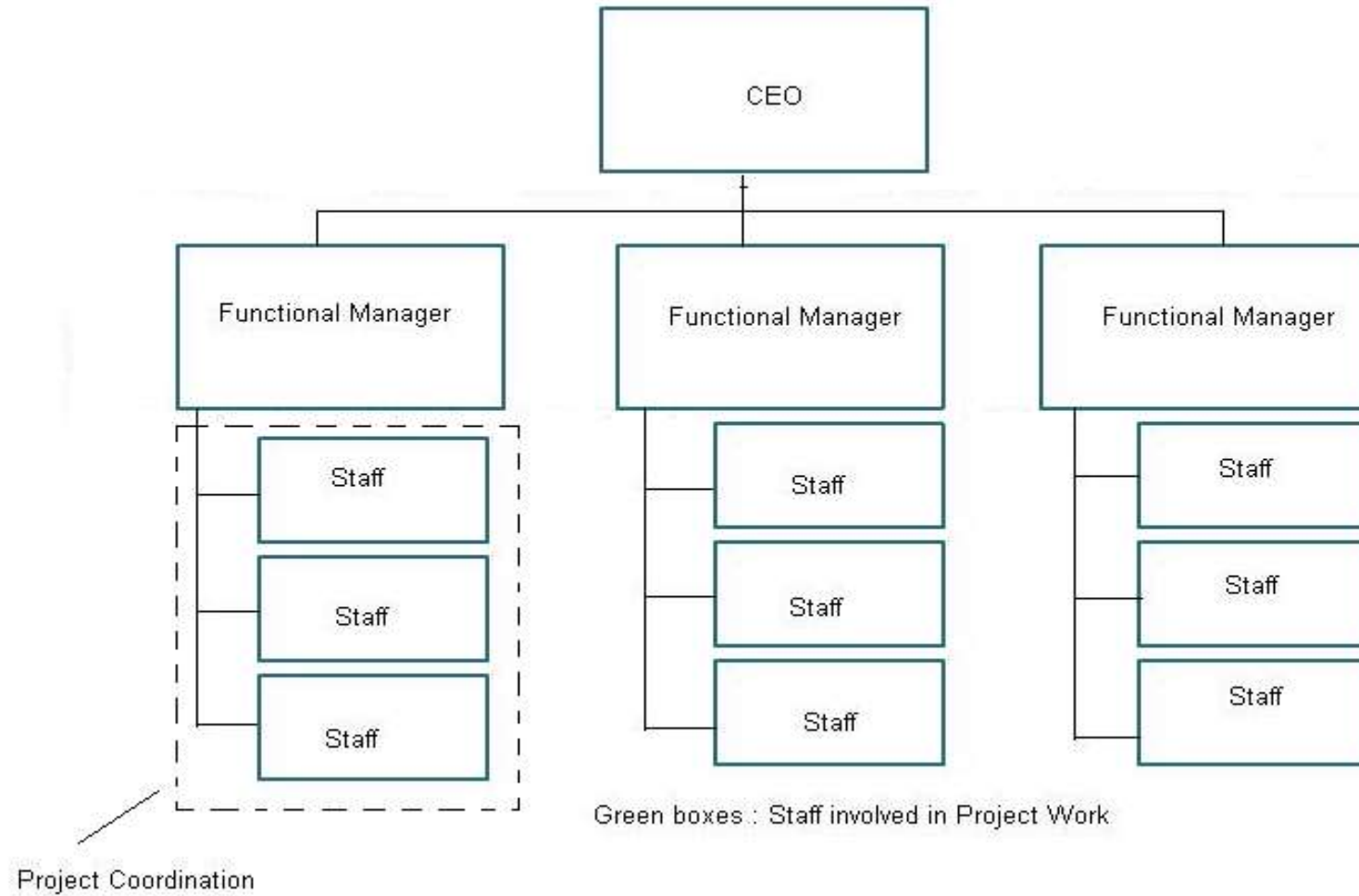
Functional Organization

- Hierarchical
- Grouped by area of specialization
- Staff members report to a clear superior
- Project scope is usually limited to the department's boundaries
- Project manager has title authority
- The most common form of the organization.

Functional Organization Analysis

Advantages	Disadvantages
Technical Management is easier.	No authority for project manager
Clear career path in areas of specialization	No career path in project management
Team members report to only one boss	People are focused on their functional specialization, instead on their projects.

Projectized Organization



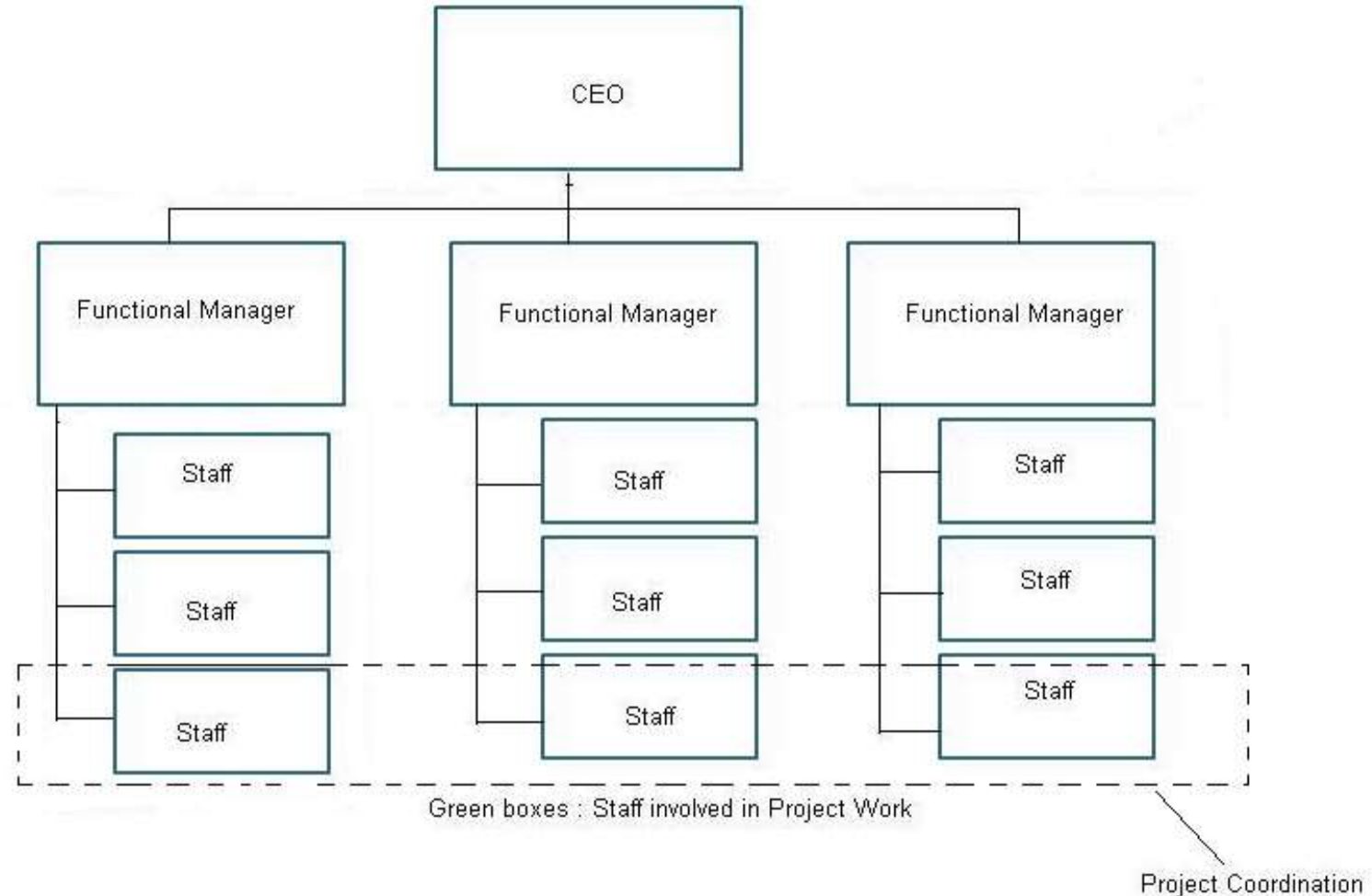
Projectized Organization

- All work is organized by projects.
- Project Manager has total control over the projects.
- Personnel report only to project manager.

Projectized Organization Analysis

Advantages	Disadvantages
Efficient Project Organization	Team is disbanded when project ends
Better alignment of people interest with their project objective.	Less efficient usage of resources
Communication is more effective than in functional structures	Duplication of job functions

Matrix Organization



Matrix Organization

- Balance between functional and projectized
- Three types
 - Weak-Functional manager has more power than project manager
 - Balanced-functional manager and project manager share authority
 - Strong-power rests with project manager.
- Staff members report to two bosses-project manager and functional manager

Matrix Organization Analysis

Advantages	Disadvantages
Better visibility of project objectives	People reports two managers
Better project management control of resources	More complex to control
Team members are not disbanded when project ends	Resources allocation problems
Maximum utilization of resources	Potential conflicts between project managers and functional managers.

Final Project Report Table of Contents

1. Project Objectives
2. Summary of Project Results
3. Original and Actual Start and End Dates
4. Original and Actual Budget
5. Project Assessment (Why did you do this project? What did you produce? Was the project a success? What went right and wrong on the project?)
6. Transition Plan
7. Annual Project Benefits Measurement Approach

Final Project Report Table of Contents (continued)

Attachments: A. Project Management Documentation

- Business case
- Project charter
- Team contract
- Scope statement
- WBS
- Baseline and actual Gantt chart
- List of prioritized risks
- Milestone reports
- Status reports
- Contract files
- Lessons-learned reports
- Final presentation
- Client acceptance form

Final Project Report Table of Contents (continued)

Attachments: B. Product-Related Documentation

- Survey and results
- Summary of user inputs
- Intranet site content
- Intranet site design documents
- Test plans and reports
- Intranet site promotion information
- Intranet site roll-out information
- Project benefits measurement information

List of Prioritized Risks

RANKING	POTENTIAL RISK
1	Lack of inputs from internal consultants
2	Lack of inputs from client representatives
3	Security of new system
4	Outsourcing/purchasing for the article retrieval and “Ask the Expert” features
5	Outsourcing/purchasing for processing online payment transactions
6	Organizing the templates and examples in a useful fashion
7	Providing an efficient search feature
8	Getting good feedback from Michael Chen and other senior consultants
9	Effectively promoting the new system
10	Realizing the benefits of the new system within one year

Part of Milestone Report

MILESTONE	DATE	STATUS	RESPONSIBLE	ISSUES/COMMENTS
<i>Initiating</i>				
Project manager determined/assigned	May 2	Completed	Joe	
Business case created	May 6	Completed	Erica	
Project charter signed	May 10	Completed	Erica	
<i>Planning</i>				
Project kickoff meeting held	May 13	Completed	Erica	Went well
Team contract signed	May 13	Completed	Erica	
Scope statement completed	May 27	Completed	Erica	
WBS completed	May 31	Completed	Erica	
List of prioritized risks completed	June 3	Completed	Erica	Reviewed with sponsor and team
Schedule and cost baseline completed	June 13	Completed	Erica	
<i>Executing</i>				
Survey completed	June 28		Erica	Poor response so far!
Intranet site design completed	July 26		Kevin	
Project benefits measurement completed	August 9		Erica	