# What we learned last week

- Design of a project portfolio system:
  - Classification of a project
    - Compliance / strategic / Operational project
  - Selection criteria depending upon classification
    a. Financial criteria / nonfinancial criteria

    Payback analysis / NPV / ROI

    b. Multi-Criteria Selection model

    Checklist models / Multi-weighted scoring models
  - Applying a Selection Model

    Project Classification / Sources and Solicitation of Project Proposals / Ranking Proposals and Selection of Projects / Managing the Portfolio System

Chapter Three

Organization: Structure and Culture

Where We Are Now
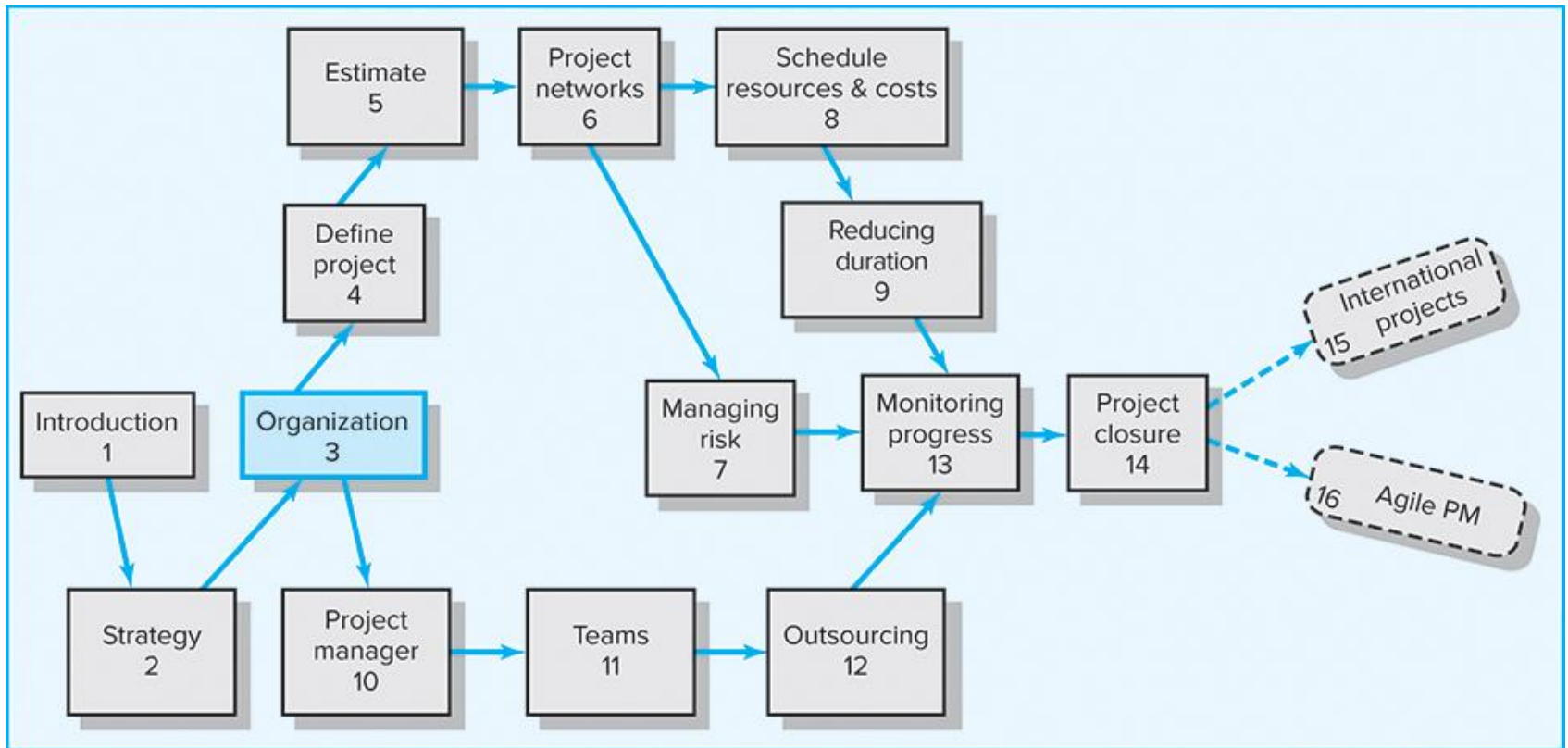
Learning Objectives

Once management approves **a project**, how will the project *be implemented?*

Chapter Outline

- Project Management Structures
- What Is the Right Project Management Structure?
- Organizational Culture
- Implications of Organizational Culture for Organizing Projects

Project Management Structures

- How will the project *be implemented?*

  – A project management system provides a framework for implementing project within a parent organization.

  – A good **system** balances the needs of the project with the needs of the organization.

- Choosing an Appropriate Project Management Structure

Project Management Structures

Types of project management structures

- Functional organization

- Dedicated project teams

- Matrix organization

Project Management Structures (cont'd)

- Organizing Projects: Functional Organization

  - Different segments of the project are delegated to respective functional units (Figure 3.2).

  - Coordination is maintained through *normal management channels.*

  - It is used when the interest of one functional area dominates the project or one functional area has a dominant interest in the project's success.

    - e.g., the upgrading of the management information system ⬅ by the information systems department
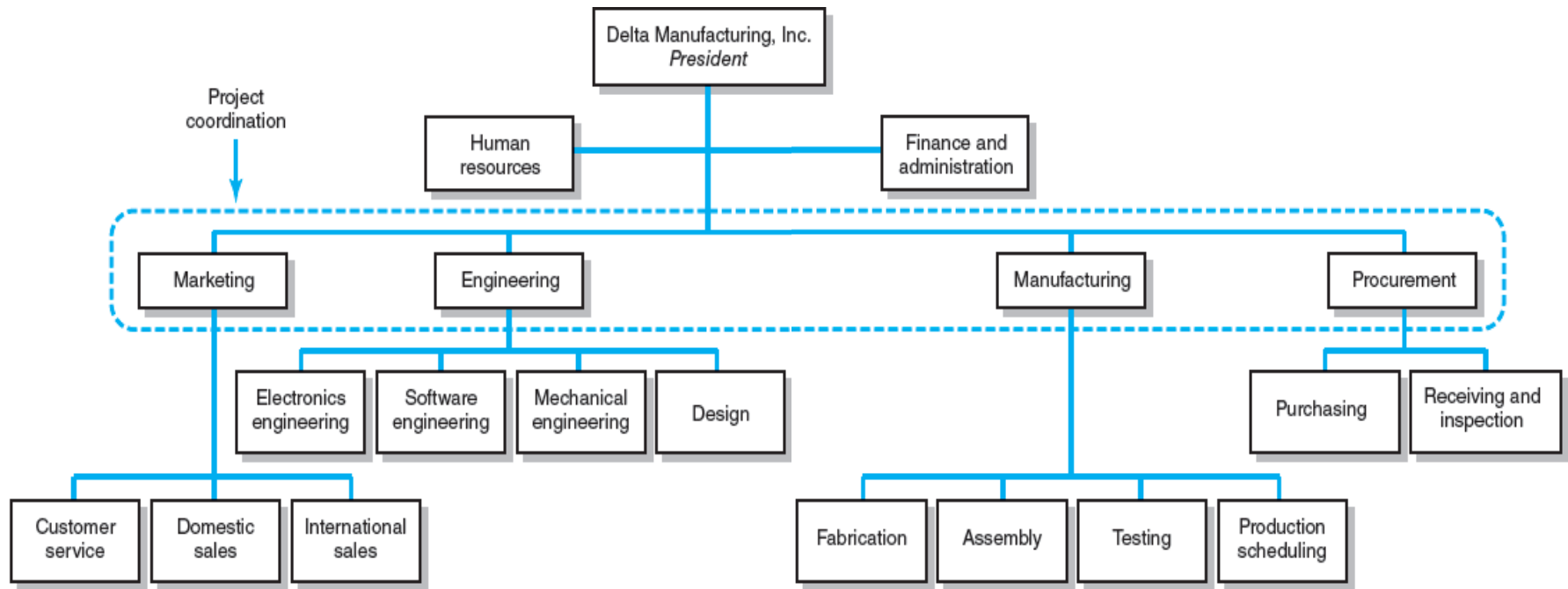
Functional Organizations

FIGURE 3.2

Functional Organizations: pros and cons

Advantages	Disadvantages
No structural change	**Lack of focus** Each functional unit has its own core routine work to do
Flexibility maximum flexibility in the use of staff	**Poor integration** Functional specialist tend to be concerned only with their segment
In-depth expertise the proper functional unit is assigned	**Slow** circulated through normal management channels
Easy post-project transition their functional field is their professional home	**Lack of ownership** the project may be seen as an additional burden

Project Management Structures (cont'd)

- Organizing Projects: Dedicated Project Teams

  – Teams operate as separate units under the leadership of a full-time project manager (Figure 3.3).

  – In a *projectized* organization where projects are the dominant form of business, functional departments are responsible for providing support for its teams (Figure 3.3).
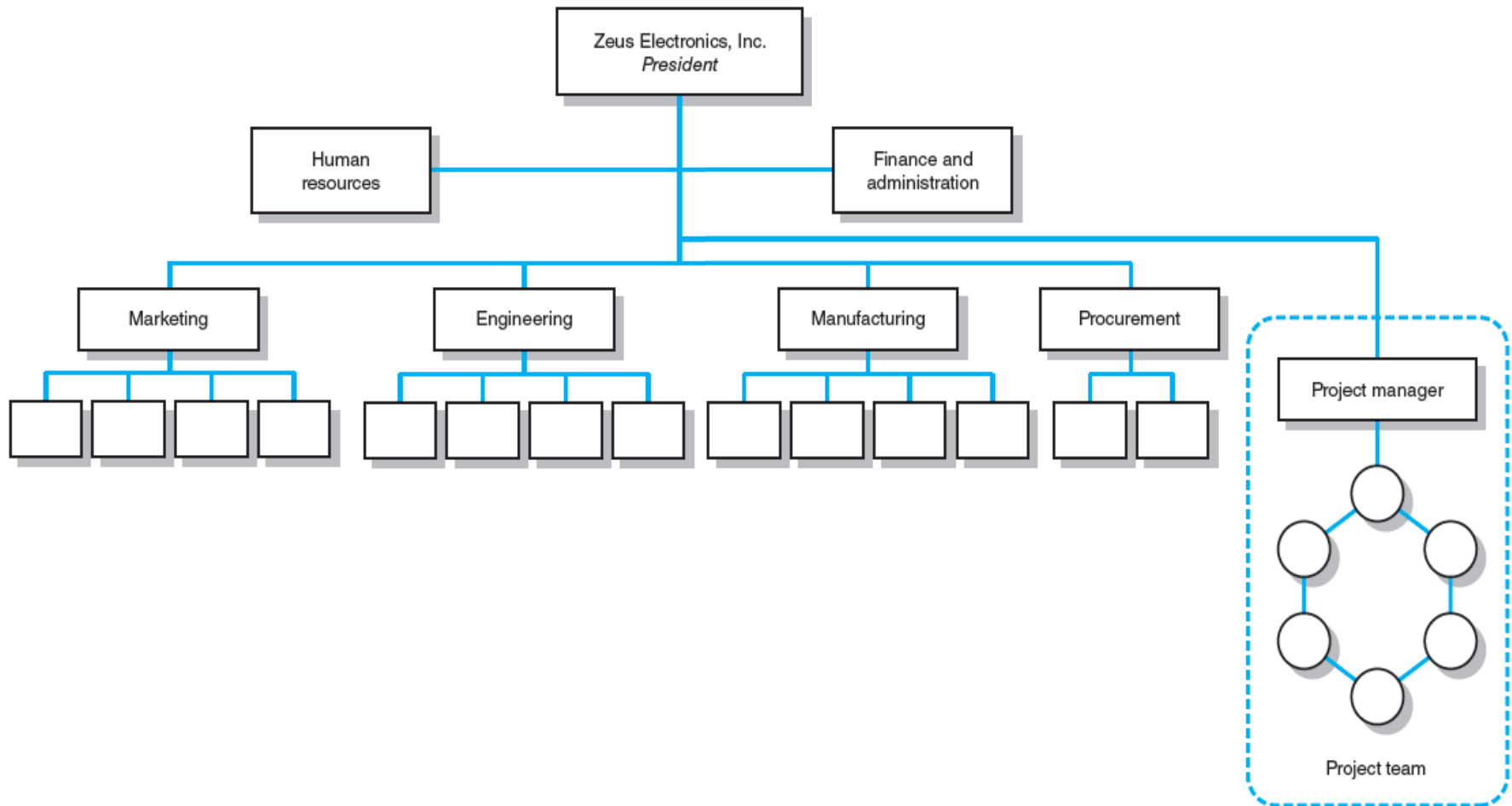
Dedicated Project Team

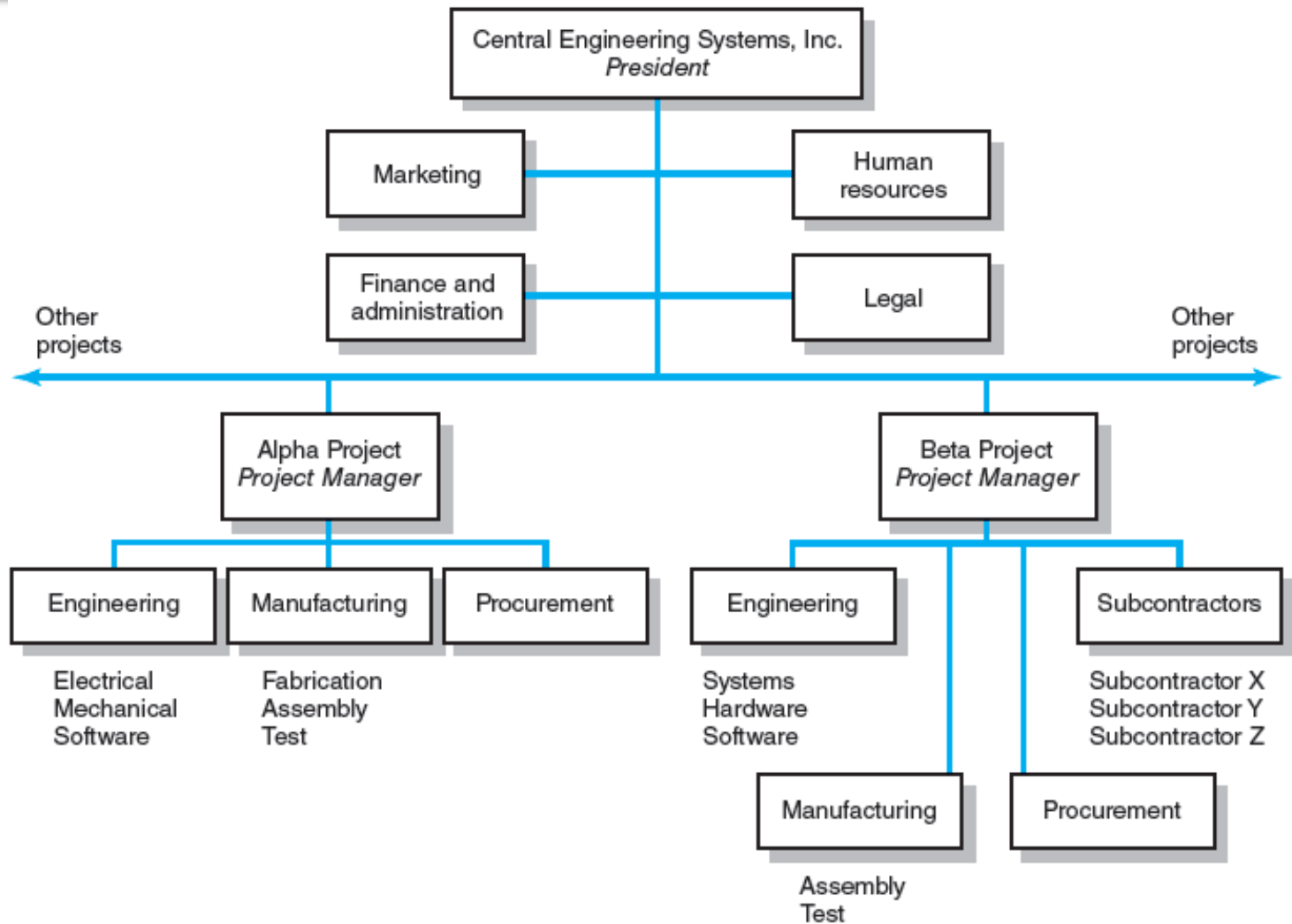**FIGURE 3.3**

Projectized Organization Structure

FIGURE 3.4

Dedicated Project Team: pros and cons

Advantages	Disadvantages
Simple the functional organization remains intact	**Expensive** a new project manager – resources are assigned on a full-time basis
Fast full attention to the project	**Internal strife** separated from the organization
Cohesive within the project team	**Limited (in-house) technological expertise**
Cross-functional integration Specialists from different areas work closely together	**Difficult post-project transition** back to their original functional departments may be difficult

Project Management Structures (cont'd)

- Organizing Projects: Matrix Structure
  - Hybrid organizational structure (matrix) is overlaid on the normal functional structure (Figure 3.5).
    - Two chains of command (functional and project)
    - Project participants report simultaneously to both **functional** and **project managers**.
  - Matrix structure optimizes the use of resources.
    - Allows for participation on multiple projects while performing normal functional duties
    - Achieves a greater integration of expertise and project requirements
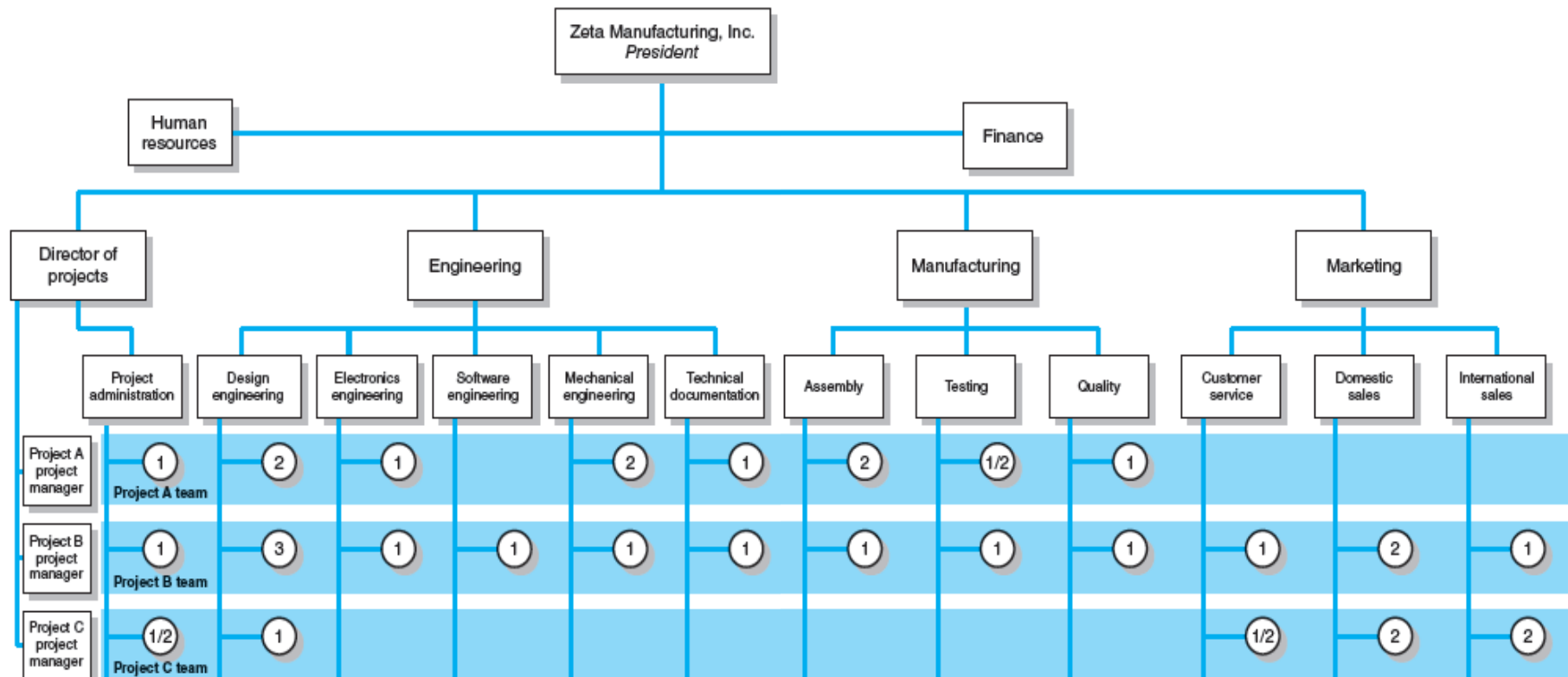
Matrix Organization Structure

FIGURE 3.5

Division of Project Manager and Functional Manager Responsibilities in a Matrix Structure

Project manager	Functional manager	Negotiated issues
What has to be done?	How will it be done?	Who will do the task?
When should the task be done?		Where will the task be done?
How much money is available to do the task?	How will the project involvement impact normal functional activities?	Why will the task be done?
How well has the total project been done?	How well has the functional input been integrated?	Is the task satisfactorily completed?

Different Matrix Forms

- Weak Form: The authority of the functional manager predominates and the project manager has indirect authority.

- Balanced Form: The project manager sets the overall plan and the functional manager determines how work to be done.

- Strong Form: The project manager has broader control and functional departments act as subcontractors to the project.

Functional Organization	Matrix Organization			Projectized Organization
	Weak Matrix	Balanced Matrix	Strong Matrix	

Project Manager Authority

Functional Manager Authority

Matrix Organization Structure: pros and cons

Advantages	Disadvantages
Efficient (resources can be shared across multiple projects **)**	**Dysfunctional conflict (**tension: functional Vs Project Managers**)**
Strong project focus (dedicated PM)	**Infighting (**equipment, resources, and people are being shared**)**
Flexible (flexible utilization of resources and expertise within the firm**)**	**Slow (**decisions spread over several departments and PM**)**
Easy post-project Transition (overlay on functional organisation**)**	**Stressful (**multiple "bosses")**

Chapter Outline

- Project Management Structures

- **What Is the Right Project Management Structure?**

- Organizational Culture

- Implications of Organizational Culture for Organizing Projects

What Is the Right Project Management Structure?

- Organization Considerations
  - How important is the project to the firm's success?
  - What percentage of core work involves projects?
    - If over 75 % of work involves projects, then ?
    - If an organization has both standard products and projects, then ?
    - If an organization has very few projects, then ?
  - What level of resources (human and physical) are available?
    - For organizations that cannot afford to tie up critical personnel on individual project, then ?
    - Shared => matrix Or dedicated teams + outsourcing

What Is the Right Project Management Structure? (cont'd)

- Project Considerations
  - Size of project
  - Strategic importance
  - Novelty and need for innovation
  - Need for integration (number of departments involved)
  - Environmental complexity (number of external interfaces)
  - Budget and time constraints
  - Stability of resource requirements

What Is the Right Project Management Structure? (cont'd)

- Project Considerations
  - Size of project
  - Strategic impor...
  - Novelt... innovation
  - ...egration (nu... ...nts involved)
  - ...vironmental... ...ber of external interfaces)...
  - ... ...e constraints
  - ...ty of resource requirements

Large, strategically critical, new to the company, complex and multidisciplinary project

Urgent projects in which the nature of the work requires people working steadily from beginning to end

Working in a matrix system at the Newcastle university is different from working in a matrix system at CSIRO.

This difference is the

organizational culture (personality of an organization)

Chapter Outline

- Project Management Structures
- What Is the Right Project Management Structure?
- **Organizational Culture (10 mins break)**
- Implications of Organizational Culture for Organizing Projects

Organisational culture

- Project manager said

  – "The key to making this structure work is the culture in our company. This approach would never work at company Y, where I worked before. But because of our culture here we are able to pull it off."

- There is a strong connection between project management structure, organizational culture, and project success
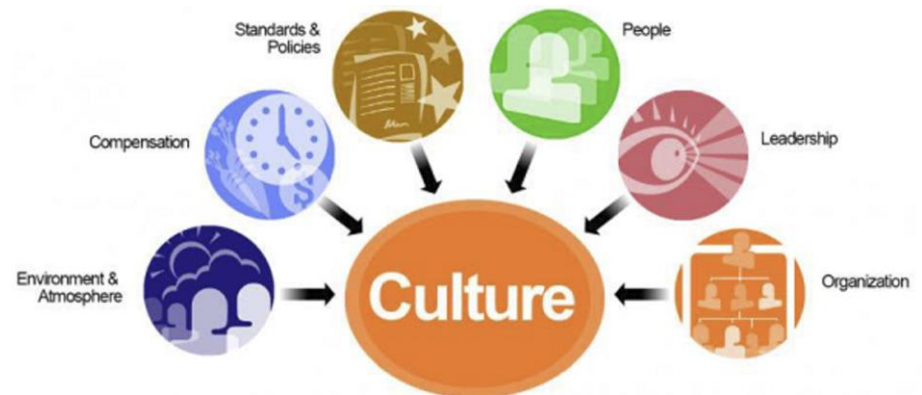
Organizational Culture

- Organizational Culture Defined

  - A system of shared norms, beliefs, values, and assumptions which binds people together, thereby creating **shared meanings**.

  - The "personality" of the organization that sets it apart from other organizations.

    - Provides a sense of identify to its members: Commitment to the organization and reasons for members to devote energy and loyalty to the organization

    - Helps legitimise the management system of the organization: Reasons why people are in a position of authority and why their authority should be respected.

    - Clarifies and reinforces standards of behavior: What is permissible and inappropriate behavior: dress code, working hours

    - Helps create social order: The customs, norms and ideals: the stability and predictability in behavior

Identifying Cultural Characteristics

- Study the physical characteristics of an organization
  - What does the external architecture look like?

- Read about the organization
  - Examine annual reports, mission statements, press releases and internal newsletters

- Observe how people interact within the organization
  - Pace, language, meeting, issues discussed

- Interpret stories and folklore surrounding the organization

Organizational Culture Diagnosis Worksheet

Power Corp.

I. Physical Characteristics:

Architecture, office layout, décor, attire

Corporate HQ is 20 Story modern building—president on top floor. Offices are bigger in the top floors than lower floors. Formal business attire (white shirts, ties, power suits, . . .) Power appears to increase the higher up you are.

II. Public Documents:

Annual reports, internal newsletters, vision statements

At the heart of the Power Corp. Way is our vision . . . to be the global energy company most admired for its people, partnership and performance. Integrity. We are honest with others and ourselves. We meet the highest ethical standards in all business dealings. We do what we say we will do.

III. Behavior:

Pace, language, meetings, issues discussed, decision-making style, communication patterns, rituals

Hierarchical decision-making, pace brisk but orderly, meetings start on time and end on time, subordinates choose their words very carefully when talking to superiors, people rarely work past 6:00 P.M., president takes top performing unit on a boat cruise each year . . .

IV. Folklore:

Stories, anecdotes, heroines, heroes, villains

Young project manager was fired after going over his boss's head to ask for additional funds.

Stephanie C. considered a hero for taking complete responsibility for a technical error.

Jack S. was labeled a traitor for joining chief competitor after working for Power Corp. for 15 years.

FIGURE 3.7

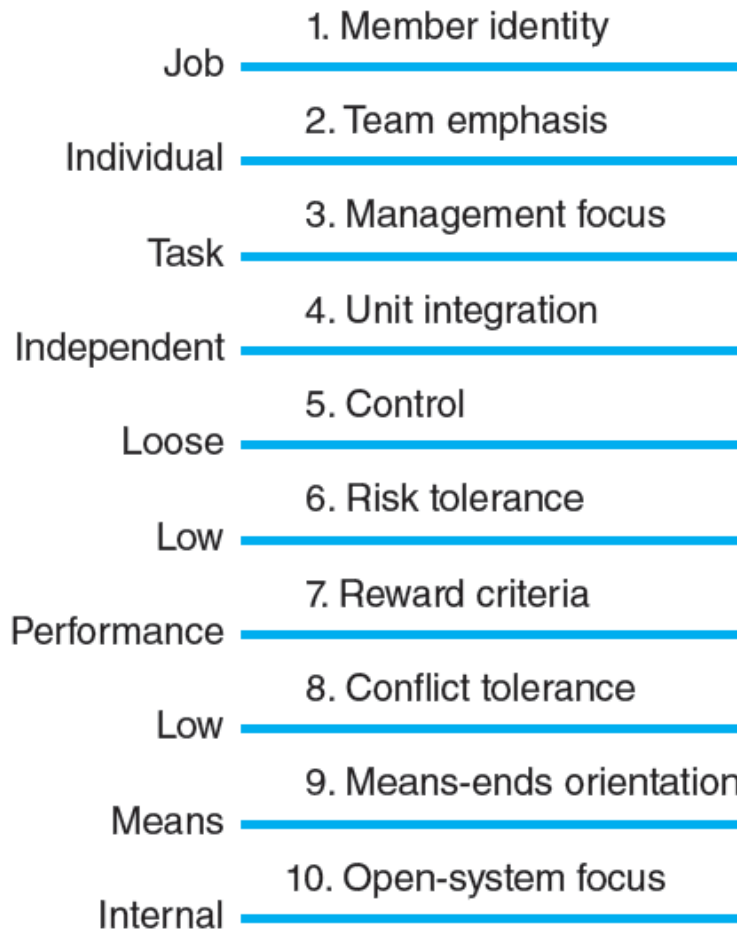# Key Dimensions Defining an Organization's Culture

FIGURE 3.6

FIGURE 3.8

Chapter Outline

- Project Management Structures
- What Is the Right Project Management Structure?
- Organizational Culture
- **Implications of Organizational Culture for Organizing Projects**

Implications of Organizational Culture for Organizing Projects

- **Challenges for Project Managers in Navigating Organizational Cultures**

  - Interacting with the culture and subcultures of the parent organization

  - Interacting with the project's clients or customer organizations

  - Interacting with other organizations connected to the project

    - e.g., suppliers and vendors, subcontractors, consulting firms government

Implications of culture for structuring projects - example

- **3M**
  - "Encourage experimental doodling"
  - "Hire good people and leave them alone"
  - "If you put fences around people, you get sheep. Give people the room they need"
  - "15 percent rule" – technical people to spend up to 15 percent of their time on projects of their own choosing and initiative.

- This culture has contributed to 3M's branching out into more than 60,000 products and 35 separate business units.

To watch

The Power of Teamwork

https://www.youtube.com/watch?v=ftPOy4yUGMQ

Idiots Guide to Project management – from Online Readings Week 2

https://www.youtube.com/watch?v=r5qFLd1u0XQ

Why Projects Fail – from Online Readings Week 3

https://www.youtube.com/watch?v=CTHHiBNXJ6w

The Expert (Short comedy sketch)

https://www.youtube.com/watch?v=BKorP55Aqvg

Key Terms

Balanced matrix

Dedicated project team

Matrix

Strong matrix

Weak matrix

Organizational culture

Projectized organization

For next week

Defining the Project

• Finalising Project Selection: The feasibility report

To Do:

• Read Chapter 4