

# CHAPTER 13

## Project Management Organizational Structures

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### Chapter Concepts

- The characteristics of the three types of organizational structures
- The advantages and disadvantages of each
- The role of a project management office

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## Learning Outcomes

- Explain the three types of project management organizational structures
- Discuss the advantages and disadvantages of each type of project management organizational structure
- Describe the role of a project management office in a matrix organizational structure

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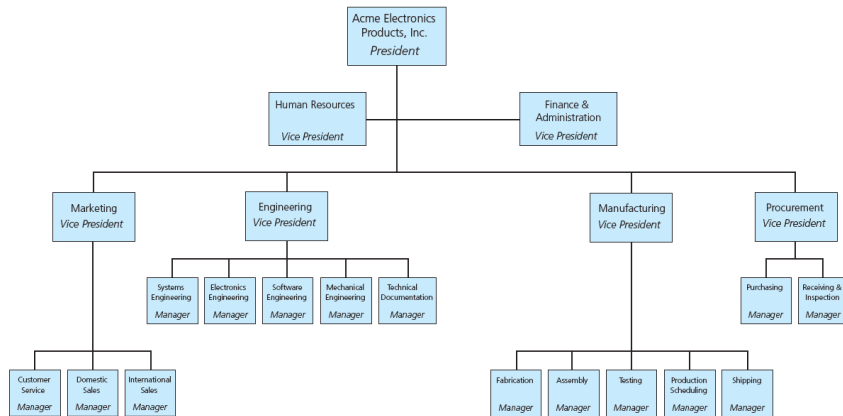
## Functional Organizational Structure

- Typically used in businesses that primarily sell and produce standard products
- Work groups consist of individuals who perform the same function
- Team members may be assigned to the project either full-time or part-time
- The project manager does not have complete authority over the project team
- Project manager regularly updates the other functional managers in the company on the status of the project

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## Industrial Business Example: Functional Organizational Structure

FIGURE 13.1 Functional Organizational Structure



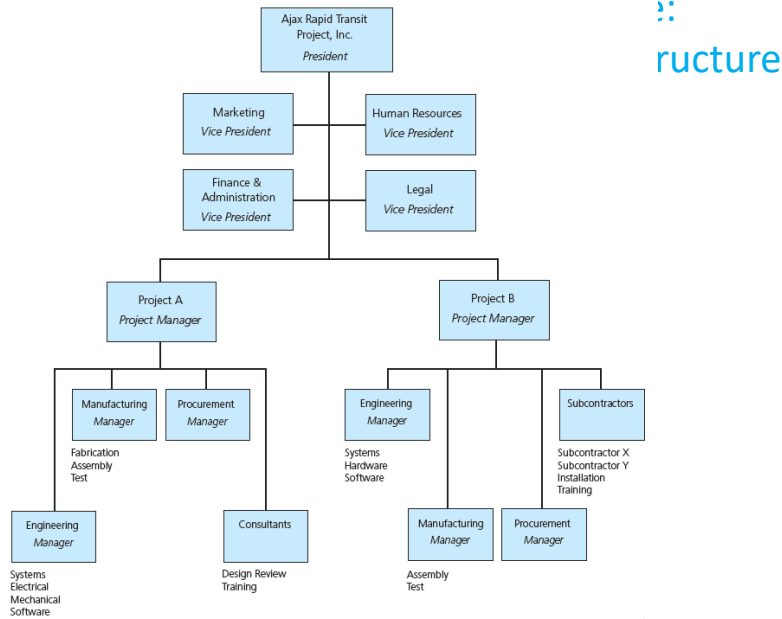
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## Autonomous Project Organizational Structure

- Companies with this organization are in the projects business; they do not produce standard products
- Company works on multiple projects at any given time; usually high dollar value and long term projects
- As projects are completed, the company hopes to get new contracts for projects
- Each project team is dedicated to only one project
- Each project is operated like a mini-company
- There is little opportunity for members of different project teams to share knowledge or technical expertise

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FIGURE 13.2 Autonomous Project Organizational Structure

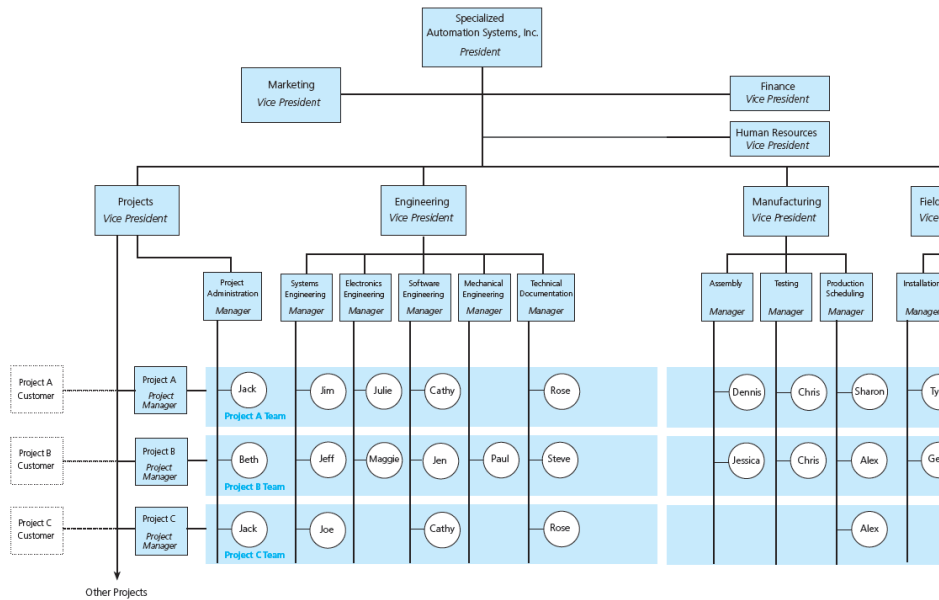


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## Matrix Organizational Structure

- Multiple projects are in progress at any given time, and these projects vary in size and complexity
- Hybrid structure—a mix of both the functional and autonomous project organizational structures
- Provides for effective utilization of company resources
  - Employees assigned to the project for the length of time they are needed
  - Pursue career development through assignment to various types of projects
  - Have a dual reporting relationship—a (temporary) project manager and a (permanent) functional manager
- Project manager is the intermediary between the company and the customer
- Checks-and-balances and fast response upon problem identification

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**FIGURE 13.3** Matrix Organizational Structure

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## Advantages and Disadvantages of Organizational Structures

**TABLE 13.1** Advantages and Disadvantages of Organizational Structures

	ADVANTAGES	DISADVANTAGES
Functional Structure	<ul style="list-style-type: none"> <li>No duplication of activities</li> <li>Functional excellence</li> </ul>	<ul style="list-style-type: none"> <li>Insularity</li> <li>Slow response time</li> <li>Lack of customer focus</li> </ul>
Autonomous Project Structure	<ul style="list-style-type: none"> <li>Control over resources</li> <li>Responsiveness to customers</li> </ul>	<ul style="list-style-type: none"> <li>Cost inefficiency</li> <li>Low level of knowledge transfer among projects</li> </ul>
Matrix Structure	<ul style="list-style-type: none"> <li>Efficient utilization of resources</li> <li>Functional expertise available to all projects</li> <li>Increased learning and knowledge transfer</li> <li>Improved communication</li> <li>Customer focus</li> </ul>	<ul style="list-style-type: none"> <li>Dual reporting relationships</li> <li>Need for balance of power</li> </ul>

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## Function Point Analysis

- Give low functional complexity 2
- Give medium functional complexity 4
- Give high functional complexity 6
- Unadjusted function points = Sum of all complexity values.
- Adjusted function points = Unadjusted FP x  $[0.65 + (\text{adjustment factor} \times 0.01)]$

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## Function Point Analysis

Data Functions	Functional Complexity	Data Functions	Functional Complexity
<b>Internal Logical Files</b>		<b>External Outputs</b>	
• Job information	Low	Jobs with employees report	Average
• Suspended jobs	Low	Employees by assignment duration report	Average
• Report definition	Low	Performance review notification	Low
• Employee information	Low	Weekly employees report	Low
<b>External Interfaces</b>		Printed check	Low
• Location information	Low	Check transaction file	Low
• Conversion information	Low		
• Window help information	Low	<b>External Inquiries</b>	
• Field help information	Low	List of retrieved data	Low
<b>External Inputs</b>		Drop-down list box	Low
Assignment report definition	Low	Field level help	Low
Add job information (screen input)	Low	Weekly membership report	Low
Add job information (batch input)	Average	Daily check file	Low
Correct suspended jobs	Low		
Employee job assignment	High		
EI with screen output –1	Average		
EI with screen output –2	Low		

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## Critical Success Factors

- In a **matrix organization**, it is important to **delineate** the **project management responsibilities** and the **functional management responsibilities**.
- When implementing a matrix organizational structure, operating guidelines should be established to assure **proper balance of power** between project managers and functional managers.
- **Project teams** should be kept as **small as feasible** throughout the project.

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## Summary

- The three most common structures used to organize people to work on projects are functional, autonomous, and matrix.
- The functional organizational structure is typically used in businesses that primarily sell and produce standard products. The advantages of a functional organizational structure are no duplication of activities and functional excellence. Disadvantages include insularity, slow response time, and lack of customer focus.
- The autonomous project organizational structure is used by companies that are working on multiple projects at any one time and do not produce standardized products. The advantages of the autonomous project organizational structure are control over resources and responsiveness to customers. Cost inefficiency and low level of knowledge transfer among projects are its disadvantages.

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## Summary (continued)

- The matrix organization is a hybrid of both the functional and the autonomous project organizational structures. The advantages of a matrix organizational structure include efficient utilization of resources, functional expertise available to all projects, increased learning and knowledge transfer, improved communication, and customer focus. Its disadvantages are the dual reporting relationships and the need for a balance of power.
- In the matrix structure, the project manager is the intermediary between the company and the customer.
- The project management office in the matrix organizational structure oversees and coordinates multiple projects.