

Instructor's Manual to Accompany **Organizational Behavior 7/e** by Steven L. McShane and Mary Ann Von Glinow



Chapter 13: Designing Organizational Structures

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Designing Organizational Structures

LEARNING OBJECTIVES

After reading this chapter, students should be able to:

1. Describe three types of coordination in organizational structures.
2. Discuss the role and effects of span of control, centralization, and formalization, and relate these elements to organic and mechanistic organizational structures.
3. Identify and evaluate six types of departmentalization.
4. Explain how the external environment, organizational size, technology, and strategy are relevant when designing an organizational structure.



CHAPTER GLOSSARY

centralization -- the degree to which formal decision making authority is held by a small group of people, typically those at the top of the organizational hierarchy.

divisional structure -- An organizational structure in which employees are organized around geographic areas, outputs (products or services), or clients.

formalization -- the degree to which organizations standardize behavior through rules, procedures, formal training, and related mechanisms.

functional structure -- an organizational structure in which employees are organized around specific knowledge or other resources.

globally integrated enterprise -- an organizational structure in which work processes and executive functions are distributed around the world through global centers, rather than developed in a home country and replicated in satellite countries or regions

matrix structure -- an organizational structure that overlays two structures (such as a geographic divisional and a functional structure) in order to leverage the benefits of both.

mechanistic structure -- an organizational structure with a narrow span of control and a high degree of formalization and centralization.

network structure -- An alliance of several organizations for the purpose of creating a product or serving a client.

organic structure -- an organizational structure with a wide span of control, little formalization and decentralized decision making.

organizational strategy -- the way the organization positions itself in its setting in relation to its stakeholders, given the organization's resources, capabilities, and mission.

organizational structure -- the division of labor as well as the patterns of coordination, communication, workflow, and formal power that direct organizational activities.

span of control -- the number of people directly reporting to the next level in the hierarchy.

team-based organizational structure -- an organizational structure built around self-directed teams that complete an entire piece of work

CHAPTER SUMMARY BY LEARNING OBJECTIVE

13-1 Describe three types of coordination in organizational structures.

Organizational structure is the division of labor, as well as the patterns of coordination, communication, workflow, and formal power, that direct organizational activities. All organizational structures divide labor into distinct tasks and coordinate that labor to accomplish common goals. The primary means of coordination are informal communication, formal hierarchy, and standardization.

13-2 Discuss the role and effects of span of control, centralization, and formalization, and relate these elements to organic and mechanistic organizational structures.

The four basic elements of organizational structure are span of control, centralization, formalization, and departmentalization. The optimal span of control – the number of people directly reporting to the next level in the hierarchy – depends on what coordinating mechanisms are present other than formal hierarchy, whether employees perform routine tasks, and how much interdependence there is among employees within the department.

Centralization occurs when formal decision authority is held by a small group of people, typically senior executives. Many companies decentralize as they become larger and more complex, but some sections of the company may remain centralized while other sections decentralize. Formalization is the degree to which organizations standardize behavior through rules, procedures, formal training, and related mechanisms. Companies become more formalized as they get older and larger. Formalization tends to reduce organizational flexibility, organizational learning, creativity, and job satisfaction.

Span of control, centralization, and formalization cluster into mechanistic and organic structures. Mechanistic structures are characterized by a narrow span of control and a high degree of formalization and centralization. Companies with an organic structure have the opposite characteristics.

13-3 Identify and evaluate six types of departmentalization.

Departmentalization specifies how employees and their activities are grouped together. It establishes the chain of command, focuses people around common mental models, and encourages coordination through informal communication among people and subunits. A simple structure employs few people, has minimal hierarchy, and typically offers one distinct product or service. A functional structure organizes employees around specific knowledge or other resources. This structure fosters greater specialization and improves direct supervision, but it weakens the focus on serving clients or developing products.

A divisional structure groups employees around geographic areas, clients, or outputs. This structure accommodates growth and focuses employee attention on products or customers rather than tasks. However, this structure also duplicates resources and creates silos of knowledge. Team-based structures are very flat, with low formalization, and organize self-directed teams around work processes rather than functional specialties. The matrix structure combines two structures to leverage the benefits of both types. However, this approach requires more coordination than functional or pure divisional structures, may dilute accountability, and increases conflict. A network structure is an alliance of several organizations for the purpose of creating a product or serving a client.

13-4 Explain the relevance of the external environment, organizational size, technology, and strategy for designing an organizational structure.

The best organizational structure depends on whether the environment is dynamic or stable, complex or simple, diverse or integrated, and hostile or munificent. Another contingency is the organization's size. Larger organizations need to become more decentralized and more formalized. The work unit's technology – including variability of work and analyzability of problems – influences whether it should adopt an organic or mechanistic structure. These contingencies influence but do not necessarily determine structure. Instead, corporate leaders formulate and implement strategies that shape both the characteristics of these contingencies and the organization's resulting structure.

LECTURE OUTLINE (WITH POWERPOINT® SLIDES)



Designing Organizational Structures

Designing Organizational Structures
Slide 1



Valve Corporation's Organizational Structure

Valve Corporation has a flat, organic organizational structure to leverage the creative and entrepreneurial potential of its 300 employees.

Valve Corporation's Organizational Structure
Slide 2



Organizational Structure Defined

Division of labor and patterns of coordination, communication, workflow, and formal power that direct organizational activities

- More than just an organizational chart
- Relates to job design, team dynamics, power relationships, etc.

Organizational Structure Defined
Slide 3



Division of Labor and Coordination

Division of labor results in job specialization

- Work subdivided into separate jobs, assigned to different people
- Improves work efficiency

Coordination of work

- Value of dividing labor is limited to ability to coordinate that work
- Coordinating work can be costly, which also limits work division
- Every organization uses one or more of three coordinating mechanisms
 - informal communication
 - formal hierarchy
 - standardization

Division of Labor and Coordination
Slide 4

Coordination Through Informal Communication

- Informal communication coordinates work in all firms
- Vital in nonroutine and ambiguous situations
- Easiest in small firms, but technology extends its use in large firms
- Larger firms also apply informal communication through
 - Liaison roles
 - Integrator roles
 - Temporary teams

Coordination through Informal Communication Slide 5

Coordination through Informal Communication

- All organizations use informal communication to coordinate work
- Sharing information, forming common mental models
- Vital in nonroutine and ambiguous situations – media rich channels
- Easiest in small firms, but information technologies extends use of informal communication in large firms
- Larger organizations also apply informal communication through:
 1. Liaison roles – employees who are expected to communicate and share information with co-workers in other work units
 2. Integrator roles – Employees responsible for coordinating a work process by encouraging others to share information
 3. Temporary teams – cross-functional project team from various departments

Other Coordinating Mechanisms

- Formal hierarchy
 - Direct supervision
 - Assigns legitimate power to manage others
 - Necessary in most firms, but has problems
- Standardization – routine behavior/output
 - Standardized processes (e.g., job descriptions)
 - Standardized outputs (e.g., sales targets)
 - Standardized skills (e.g., training)

Other Coordinating Mechanisms Slide 6

Other Coordinating Mechanisms

Formal hierarchy

- Direct supervision -- the chain of command
- Assigns formal (legitimate) power to people who direct work processes and allocate resources
- Necessary in larger firms, but has problems:
 - a) reduces firm's agile in complex/novel situations
 - b) creates costly bureaucracy
 - c) conflicts with employee autonomy and involvement

Standardization

Creating routine patterns of behavior or output

Three forms of standardization

1. Standardized processes -- job descriptions and procedures
2. Standardized outputs -- clear goals and outputs (e.g. sales targets)
3. Standardized skills -- extensive training for precise role behaviors

Elements of Organizational Structure



Elements of Organizational Structure
Slide 7

Elements of Organizational Structure

Four basic elements of organizational structure

1. Span of control
2. Centralization
3. Formalization
4. Departmentalization

KenGen's Flatter Structure

KenGen, Kenya's leading electricity generation company, reduced its hierarchy from 15 layers to just 6 layers. "This flatter structure has reduced bureaucracy and it has also improved teamwork," explains KenGen executive Simon Nguni.



KenGen's Flatter Structure
Slide 8

KenGen's Flatter Structure

KenGen, Kenya's leading electricity generation company, reduced its hierarchy from 15 layers to just 6 layers. "This flatter structure has reduced bureaucracy and it has also improved teamwork," explains KenGen executive Simon Nguni

Span of Control

- Number of people directly reporting to the next level
- Wider span of control possible when:
 - Other coordinating mechanisms are present
 - Routine tasks
 - Low employee interdependence



Span of Control
Slide 9

Span of Control

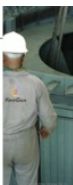
Number of people directly reporting to the next level

Wider span of control is possible when:

1. Other coordinating mechanisms are present
 - ➔ e.g. self-directed teams coordinate through informal communication and specialized knowledge (standardization)
2. Tasks are routine
 - ➔ require less direction/advice from supervisors
3. Low employee interdependence
 - ➔ less interpersonal conflict and clearer roles/responsibilities, so less supervisor intervention needed

Tall vs Flat Structures

- As companies grow, they:
 - Build a taller hierarchy
 - Widen span, or both
- Problems with tall hierarchies:
 - Faster upward information
 - Overhead costs
 - Focus power around managers, so staff feel less empowered



Tall vs. Flat Structures
Slide 10

Tall vs. Flat Structures

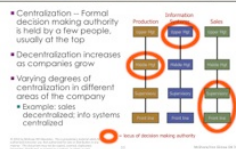
Span of control is interconnected with organizational size (number of employees) and number of layers in the hierarchy

As companies grow, they (a) build a taller hierarchy and/or (b) widen span of control

Problems with tall hierarchies

- Information to execs is filtered, distorted, slowed up hierarchy
- Higher overhead costs – more managers per employee
- Undermines employee empowerment/engagement -- hierarchies draw power away from front line jobs

Centralization/Decentralization



Centralization/
Decentralization
Slide 11

Centralization/Decentralization

Centralization

- Formal decision making authority is held by a small group of people, typically at the top of the hierarchy

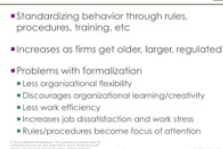
Decentralization

- Decision authority/power is dispersed throughout the organization
- Firms decentralize as they get larger and older

Centralization/decentralization varies in different parts of the organization

- e.g. marketing decentralized, IT centralized

Formalization



Formalization
Slide 12

Formalization

Standardizing behavior through rules, procedures, formal training, and related mechanisms.

- More formalization with firm's age, size, regulations

Problems with formalization

- Less organizational flexibility – employees follow prescribed behaviors even when the situation calls for a customized response
- Discourages organizational learning and creativity
- Less work efficiency – work rules become convoluted
- Increases job dissatisfaction and work stress
- Rules/procedures become the focus of attention

Mechanistic vs. Organic Structures



Mechanistic vs. Organic Structures
Slide 13

Mechanistic vs. Organic Structures

Mechanistic structure

- Narrow span of control – more supervision of staff
- High centralization – limited decision making at lower levels
- High formalization – many rules and procedures, rigidly defined jobs

Organic structure

- Wide span of control -- less supervision, more employees per manager
- Decentralized decision making -- more employee autonomy
- Low formalization – few rules/procedures (i.e. less coordination through standardized processes)
- Works better when employees have well-developed roles and expertise (i.e. standardization through skills)

Mechanistic structures better in stable environments -- easier to establish routine behaviors

Organic structures better in rapidly changing (dynamic) environments -- more flexible and responsive to these changes

Departmentalization

Specifies how employees and their activities are grouped together – reflected in organizational chart

Three functions of departmentalization:

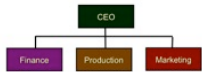
1. Establishes chain of command (supervision structure)
2. Creates common mental models, measures of performance
3. Encourages staff to coordinate through informal communication – members typically work near each other

Features of Simple Structures

- Employ only a few people and typically offer only one distinct product or service
- Minimal hierarchy – employees usually report to the owners
- Roles are broadly defined – to maintain flexibility
- Informal communication for coordination – minimizes walls between employees
- Centralized structure – owners provide direct supervision to coordinate tasks

Functional Organizational Structure

- Organizes employees around specific knowledge or other resources (e.g., marketing, production)



Functional Organizational Structure
Slide 14

Functional Organizational Structure

Organizes employees around specific knowledge or resources (marketing, production)

Typically centralized – to coordinate diverse activities

Most firms have functional structure at some level of the hierarchy or at some time in their history

Evaluating Functional Structures

- Benefits
 - Economies of scale
 - Supports professional identity and career paths
 - Easier supervision
- Limitations
 - Emphasizes subunit more than organizational goals
 - Higher dysfunctional conflict
 - Poorer coordination – requires more controls

Evaluating Functional Structures
Slide 15

Evaluating Functional Structures

Benefits

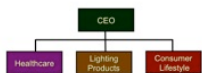
- Economies of scale – specialized pools of talent
- Supports employee identity with the specialization or profession
- Direct supervision is easier – employees have common issues

Limitations

- More emphasis on skills/professional needs than on the company's product, service, or client needs
- Higher dysfunctional conflict across units
- Poorer coordination – requires more controls

Divisional Structure

- Organizes employees around outputs, clients, or geographic areas



Divisional Structure
Slide 16

Divisional Structure

Organizes employees around geographic areas, outputs (products or services), or clients

Divisional Structure

- Best type of divisional structure depends on environmental diversity or uncertainty
- Geographic structures becoming less common because:
 - Less need for local representation
 - Reduced geographic variation
 - More global clients

Divisional Structure Slide 17

Divisional Structure

Different forms of divisional structure

- Geographic – organizes employees around distinct regions
- Product – organizes employees around distinct outputs
- Client – organizes employees around specific customer groups

Best form depends on main environmental diversity or uncertainty

- e.g. product structure if company sells several types of products
- e.g. geographic structure if clients needs vary across regions

Geographic divisional structures becoming less common because:

- Less need for local representation – clients can purchase online and communicate with businesses from anywhere
- Reduced geographic variation – consumer preferences are converging around the world
- More global clients who demand one global point of purchase

Globally Integrated Enterprise

Globally integrated enterprise

- Work processes and executive functions are distributed around the world through global centers, rather than developed in a home country and replicated in satellite countries or regions
- Functional heads are geographically distributed – sensitive to cultural and market differences
- Firm's "home" country is no longer focus of business – divisional

Evaluating Divisional Structures

- Benefits
 - Building block structure – accommodates growth
 - Focuses on markets/products/clients
- Limitations
 - Duplication, inefficient use of resources
 - Silos of knowledge – expertise isolated across divisions
 - Executive power affected by shifting divisional structure – common with complex environment

Evaluating Divisional Structures Slide 18

Evaluating Divisional Structures

Benefits

- Building block structure – accommodates growth
- Focuses employee attention on products/customers, not own skills

Limitations

- Duplicates resources-- inefficient use of resources, not pooled
- Creates silos of knowledge -- expertise isolated across divisions
- Executive power affected by shifting divisional structure (e.g., from region to product) -- common due to complex environment

Team-Based Structure

- Self-directed work teams organized around work processes
- Typically organic structure
- Usually found within divisionalized structure



Team-Based Structure
Slide 19

Team-Based Structure

Built around self-directed work teams, organized around work processes

- Typically an organic structure
 - wide span of control -- teams operate with minimal supervision
 - decentralized -- team makes day-to-day decisions
 - low formalization -- teams use more communication, less strict procedures
- Usually found within divisionalized structure, but some firms are completely team-based structures (e.g., Valve, W.L. Gore)

Evaluating Team-Based Structures

- Benefits**
 - Responsive, flexible
 - Lower admin costs
 - Quicker, more informed decisions
- Limitations**
 - Interpersonal training costs
 - Slower coordination during team development
 - Role ambiguity increases stress
 - Team leader issues -- less power, ambiguous roles/careers
 - Duplication of resources

Evaluating Team-Based Structures
Slide 20

Evaluating Team-Based Structures

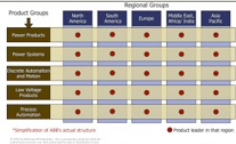
Benefits

- Responsive, flexible in turbulent environments
- Lower administrative costs – less formal hierarchy
- Quicker and informed decision making

Limitations

- Costly interpersonal skill training
- Takes longer to coordinate during team development (compared to coordinating work through formal hierarchy)
- Role ambiguity increases employee stress
- Team leader issues -- less power, ambiguous roles and careers
- Duplication of resources across teams, potential competition

ABB's* Geographic-Product Matrix Structure



ABB's Geographic-Product Matrix Structure
Slide 21

ABB's Geographic-Product Matrix Structure

Simplified example of example ABB Group's matrix structure):

- Organized around products (power systems, process automation) and regions (North America, Europe)
- One person in each region reports to both country head and product head
- Product and region heads might not have equal power
- Matrix sometimes created only for some regions due to large size, high potential, and/or low visibility to CEO's office (e.g., China)

Project-based matrix structure (see bonus slide)

- Most employees assigned permanently to a functional unit (engineering, design, marketing) but located temporarily in a specific project unit (Game #1, Game #2, etc)

Evaluating Matrix Structures

- **Benefits**
 - Uses resources and expertise effectively
 - Potentially better communication, flexibility, innovation
 - Focuses specialists on clients and products
 - Supports knowledge sharing within specialty
 - Solution when two divisions have equal importance
- **Limitations**
 - More conflict among managers who share power
 - Two bosses dilutes accountability
 - More conflict, organizational politics, and stress

Evaluating Matrix Structures
Slide 22

Evaluating Matrix Structures

Benefits

- Uses resources/expertise effectively – good for fluctuating workloads
- Potentially better communication, project flexibility, innovation
- Focuses employees on serving clients or creating products
- Supports knowledge sharing within specialty across groups
- Solution when two divisions deserve equal importance

Limitations

- More conflict among managers who share power -- different priorities
- Two bosses dilutes accountability
- More dysfunctional conflict and stress

Network Structure

Alliance of firms creating a product/service

- Emphasis on core competencies – outsource to specialists
- More common with changing technology, complex work processes

Evaluating Network Structures

- **Benefits**
 - Highly flexible – easy to change alliances
 - Potentially better use of skills and technology
 - Not saddled with nonessential facilities and resources
- **Limitations**
 - Exposed to market forces – risk of higher costs
 - Less control over subcontractors than in-house

External Environment & Structure

Dynamic	Stable
<ul style="list-style-type: none"> • High rate of change • Use team-based, network, or other organic structure 	<ul style="list-style-type: none"> • Steady conditions, predictable change • Use mechanistic structure
Complex	Simple
<ul style="list-style-type: none"> • Many elements (such as shareholders) • Decentralize 	<ul style="list-style-type: none"> • Few environmental elements • Less need to decentralize

External Environment & Structure
Slide 23

External Environment & Structure

Preferred structure depends on external environment contingencies

1. Dynamic vs. stable environments

- Dynamic environments: (high rate of change, novel situations) – organic structures are best e.g. team-based, network
- Stable environments: (regular cycles of activity) – mechanistic structures are best (when environment is predictable)

2. Complex vs. simple environments

- Complex environment – more elements to consider
- Simple environments – few things to monitor
- Decentralize -- better decisions for complex environments

External Environment & Structure

Diverse <ul style="list-style-type: none"> • Several products, clients, regions • Use divisional form aligned with the diversity 	Integrated <ul style="list-style-type: none"> • Single product, client, region • Use functional structure, or geographic division if global
Hostile <ul style="list-style-type: none"> • Competition and resource scarcity • Use organic structure for responsiveness 	Munificent <ul style="list-style-type: none"> • Plenty of resources and product demand • Less need for organic structure

External Environment & Structure (con't)

Slide 24

External Environment & Structure (con't)

3. Diverse vs. integrated environments

- Diverse environment – more varied products/services, clients, regions
- Integrated environment – only one client, product, and geographic area
- Align division/matrix with greatest diversity (e.g. product division in firms where products vary but clients similar across regions)

4. Hostile vs. munificent environments

- Hostile environment – dynamic, so resource scarcity, more competition
- Munificent environment – plenty of resources and product demand
- Organic structures better for hostile environments
- Centralization occurs in extremely hostile environments, but could lead to worse decisions and too slow decentralization later

Effects of Organizational Size

- As organizations grow, they:
1. Increase division of labor (job specialization)
 2. Increase standardization and formal hierarchy as coordinating mechanisms
 3. Become more decentralized



Effects of Organizational Size

Slide 25

Effects of Organizational Size

As organizations grow, they:

1. Increase division of labor (job specialization)
2. Increase coordination through standardization and formal hierarchy
3. Increase decentralization – push decision making down hierarchy

Technology and Structure

- Mechanisms/processes for making products or services
- Two contingencies:
 - Variability – the number of exceptions to standard procedure that tend to occur
 - Analyzability – the predictability or difficulty of the required work



Technology and Structure

Slide 26

Technology and Structure

Technology refers to mechanisms or processes by which an organization turns out its product or service

Two contingencies: (see job design in Chapter 6)

- Variability – the number of exceptions to standard procedure that tend to occur
- Analyzability – the predictability or difficulty of the work
- Example: when employees perform tasks with high variety and low analyzability an organic structure should be used e.g. research

Organizational Strategy

- Structure follows strategy
- Strategy points to the environments in which the organization will operate
- Leaders decide which structure to apply
- Innovation strategy
 - Providing unique products or attracting clients who want customization
- Cost leadership strategy
 - Maximize productivity in order to offer competitive pricing



Organizational Strategy
Slide 27

Organizational Strategy

Represents the decisions and actions applied to achieve the organization's goals

Structure follows strategy

- Strategy points to the environments in which the organization will operate
- Leaders decide which structure to apply – results from conscious human decisions

Compete through innovation

- Providing unique products or attracting clients who want customization – more organic structure is preferred

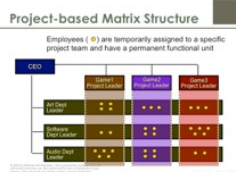
Cost leadership strategy (low-cost strategy)

- Maximize productivity to offer competitive pricing – mechanistic structure is preferred



Designing
Organizational
Structures
Slide 28

Designing Organizational Structures



Project-based Matrix
Structure
Slide 29

[Bonus Slide] Project-based Matrix Structure

Most employees assigned permanently to a functional unit (engineering, design, marketing) but located temporarily in a specific project unit (Game #1, Game #2, etc)

In this example (similar to BioWare's matrix structure):

- Organized around functions (art, audio, programming) and team-based game development projects
- Employees are assigned to a cross-functional team responsible for a specific game project, yet also belong to a permanent functional unit from which they are reassigned



SOLUTIONS TO CRITICAL THINKING QUESTIONS

1. **Valve Corporation's organizational structure was described at the beginning of this chapter. What coordinating mechanism is likely most common in this organization? Describe the extent and form in which the other two types of coordination might be apparent at Valve.**

The question offers a great opportunity for discussion, not so much about which coordinating mechanisms exist at Valve (because they all operate there to some extent), but the relative emphasis or importance of each mechanism.

Informal communication would clearly be the dominant coordinating mechanism at Valve because of its team-based structure. The fact that employees move their desks to the team's area is ample indication that communication is central to coordination here.

Standardization through skills is another important coordinating mechanism. The company hires employees with technical skills in a variety of engineering software and related fields. To some extent, they probably also look for people who have experience in flat structures because skills are needed to adapt to the ambiguity of these structures (see discussion of skills and experience in organic structures). There is less information about standardization through work processes. They probably exist to some extent, such as booking time off for vacation or procedures for buying new equipment. Even the company's orientation booklet serves as a rules/procedures guide to some extent. But Valve plays down this form of coordination. There is no information about standardization through outputs -- employees don't seem to have specific production targets, for example.

The opening vignette implies that Valve doesn't have any coordination through hierarchy. Actually, it does if you consider that the team leader takes on this role. Even though elected by peers, the team leader is given legitimate power to coordinate some of the work activities, as well as serve as liaison to others in the firm. And even if suppressed in public, Valve does have a CEO and executive team who likely wield some power in the organization.

2. **Think about the business school or other organizational unit whose classes you are currently attending. What is the dominant coordinating mechanism used to guide or control the instructor? Why is this coordinating mechanism used the most here?**

This question is sure to elicit a wide range of answers from students. For many students colleges and universities are viewed as rules-based organizations with formal hierarchies. While this may be the case for students, this is less so for instructors.

Undoubtedly, instructors are controlled to some degree. For example, they are compelled to provide and abide by their course outlines, which in some cases must be approved by department heads. They may also be limited in the weightings of their exams, and their institutions' timetables and deadlines. In this sense, it could be argued the dominant coordinating mechanism is standardization. There are standardized processes, in terms of timetables, deadlines, course outlines, rules for dealing with plagiarism etc. In some cases, there are standardized outputs, in the form of applying grading curves, and failure rates. To some degree there is reliance on standardized skills when delivering lectures and presenting information to students.

3. **Administrative theorists concluded many decades ago that the most effective organizations have a narrow span of control. Yet today's top-performing manufacturing firms have a wide span of control. Why is this possible? Under what circumstances, if any, should manufacturing firms have a narrow span of control?**

There are at least two reasons why many organizations are moving toward flatter organizational structures with a wider span of control. First, flatter structures require less overhead -- there are fewer middle managers and more people directly involved in the production of goods and/or services. Second, flatter structures are consistent with the trend toward greater autonomy and employee involvement. Managers necessarily have a wide span of control

in flatter structures, and they are unable to engage in close supervision. Instead, employees (and work teams) are given more freedom to make decisions without management review.

A narrow span of control would be most appropriate with a workforce that is low skilled and made up of workers with a high power distance. In such cases, the close supervision and control would be less likely to be viewed as a lack of trust among workers.

4. Leaders of large organizations struggle to identify the best level and types of centralization and decentralization. What should companies consider when determining the degree of decentralization?

As organizations grow they tend to diversify. Moreover, as the environments within which they operate become more complex, it is necessary for organizations to decentralize. The complexity is such that the burden on senior executives who must process all the accompanying decisions becomes overwhelming. The best way to deal with this is by dispersing decision making authority (decentralize).

The contingencies that organizations should consider when deciding the extent of decentralization are:

External environment. Decentralized structures are better suited for complex rather than simple environments. On the other hand, it is best to temporarily centralize when operating in a hostile environment.

Organizational size. When the organization grows larger, with more specialized jobs, more elaborate coordinating mechanisms, and greater formalization it is better to decentralize its structure.

Technology. In cases where the technology used requires many exceptions to standard procedures (high variety), and it is difficult to standardize the transformation of inputs to outputs (low analyzability), it is recommended that organizations should rely on decentralized decision making.

Organizational strategy. All of the above contingencies and their relationship to one another are mediated by the organization's overall strategy. For example, Johnson & Johnson's decentralized divisional structure was selected because it fits the company's strategic approach to developing and delivering a diverse array of health-related products around the world.

5. Diversified Technologies, Inc. (DTI), makes four types of products, each type to be sold to different types of clients. For example, one product is sold exclusively to automobile repair shops, whereas another is used mainly in hospitals. Expectations within each client group are surprisingly similar throughout the world. The company has separate marketing, product design, and manufacturing facilities in Asia, North America, Europe, and South America because, until recently, each jurisdiction had unique regulations governing the production and sales of these products. However, several governments have begun the process of deregulating the products that DTI designs and manufactures, and trade agreements have opened several markets to foreign-made products. Which form of departmentalization might be best for DTI if deregulation and trade agreements occur?

In this incident, the organization probably adopts primarily a product-based or client-based divisionalized structure with some functional departments (e.g. finance, legal). The company is sufficiently large and complex that a simple or functional structure is inappropriate. In particular, DTI manufactures several products to different clients globally. A matrix structure is unnecessary because production is not project based and there is not enough complexity across more than one dimension (e.g. functional skills with clients).

The product or client form of divisional structure is recommended because either represents the greatest type of differentiation. Geographic divisionalization is not needed because "customer expectations and needs are surprisingly similar throughout the world."

The decision whether to adopt a client or product form of divisional structure depends on whether production or clients are more complex. From the information presented, either form can be applied because they are identical. Each type of product is sold to a specific client.

Finally, if the production and sales processes are capable of further innovation, the company might have a team-based structure within its production and/or sales subunits. This means that employees would be divided into work teams around specific work processes, such as manufacturing or selling a particular type of product.

6. Mechanistic and organic structures are two organizational forms. How do the three types of coordination mechanisms operate through these forms?

Three coordination mechanisms are 1) informal communication, 2) formal hierarchy and 3) standardization. Mechanistic structures have high degree of formalization and centralization, limited decision making at lower levels, tasks are rigidly defined, therefore, formal hierarchy and standardization are the coordination mechanisms used here. Organic structures operate with a wide span of control, decentralized decision making and little formalization, and hence make more use of informal communication.

7. From an employee perspective, what are the advantages and disadvantages of working in a matrix structure?

Advantages. From an employee perspective, matrix structures provide opportunities, when properly managed, to enhance communication efficiencies, acquire flexibility to balance workload with other project team members and to interact and coordinate with others who have similar technical specialties. Matrix structures also require employees to have enhanced communication and interpersonal skills. As a result, employees working in matrix structures may enjoy enhanced training and development opportunities.

Disadvantages. From an employee's perspective, matrix organizations may result in increased stress, conflict and organizational politics due to having two bosses that may have divergent expectations. In addition, some employees may experience difficulty adapting to the relatively fluid nature of a matrix structure vs. working in a more structured bureaucracy.

8. Suppose you have been hired as a consultant to diagnose the environmental characteristics of your college or university. How would you describe the school's external environment? Is the school's existing structure appropriate for this environment?

This discussion question should raise some interesting ideas about the college's environment. Students should carefully consider the four environmental elements, then assess whether the environment calls for more of a mechanistic or organic structure.

Many people discover that different parts of an organization face different environments. For example, an online learning centre would face a dynamic and hostile environment because of the rapid pace of technology and number of competitors. Here are some details about the four environments.

Dynamic environments have a high rate of change, leading to novel situations, so organic structures tend to be best because employees are more flexible. For example, network and cluster structures seem to be most effective in dynamic environments. In contrast, a more mechanistic structure (high use of standardization) is best in stable environments in order to achieve efficiency.

Complex environments have more elements to consider, such as more stakeholders. Decentralized structures are therefore better suited to complex environments because they allow people closest to the environmental information to make the main decisions.

Diverse environments have greater variety of products or services, clients, and/or jurisdictions. A divisionalized form aligned with the diversity is the best structure for diverse environments. For example, companies with many distinct products in a single area would be best with a product-based divisional form.

Hostile environments have a scarcity of inputs and competition in the distribution of outputs. They are usually dynamic environments because access to resources and demand for outputs are less predictable. Organic structures are most appropriate in hostile environments in order to maintain flexibility. In extremely hostile environments, the organization may need to temporarily centralize. This is because crisis situations call for quick decisions and direct supervision is the fastest form of coordination.



CASE STUDY: MERRITT'S BAKERY

Case Synopsis

This case study describes the growth and evolution of Merritt's Bakery, and small business in Tulsa, Oklahoma. The company began with its two founders and one small store, then expanded with employees performing front-of-store activities. The case identifies a turning point where the owners had to delegate production work to employees due to growing workload. The company expanded to a few stores, which called for further changes in the organizational structure. Finally, the owner's son took over a key management role, which included the introduction of new activities in the organizational structure.

Suggested Answers to Discussion Questions

1. How have the division and coordination of labor evolved at Merritt's Bakery from its beginnings to today?

Merritt's Bakery is an excellent "true story" case study of the evolution of an organization's structure over the years, particularly its division of labor and changing coordinating mechanisms.

Division of Labor

The case identifies a few turning points in the division of labor. The company begins with just the two owners. Even so, they divided labor based on their expertise -- Larry made the cakes and Bobbie decorated them (because she had previous experience in this delicate work). Next, after their first expansion, the owners hired two employees to perform front of store sales and service. As the business expanded further, more employee were hired. No information about further division of labor at this stage, possibly all employees performed both cashier and service work as integrated tasks.

When Merritt's Bakery moved to its large 6,000-foot location, the lack of division of labor took its toll. The owners had difficulty keeping up with production, so they stepped back from their production roles and created formalized positions in production for employees. The emerging division of labor is described when Merritt's opened a second store. "Each store was assigned a manager, a person in charge of baking production, another in charge of cake decorating and pastries, and someone responsible for sales." Administrative roles also developed, including Larry's increasing role as a trainer and more recently a marketing director.

More division of labor occurred when production was moved to a separate location rather than within each store. There would be a supervisor of production and likely people to perform inventory and delivery activities.

Coordinating Mechanisms

Informal communication would have been the dominant coordinating mechanism when Merritt's Bakery began and possibly throughout its early years. Informal communication would also be important as other coordinating mechanisms developed because Merritt's store operated with a small number of staff, proximate work locations, and frequent coordination is required.

Standardization of skills is identified as an increasing coordinating mechanisms as Larry placed more emphasis on training staff in each store to perform the baking consistently and to a high standard. As stated by Larry Merritt, "Because it is so difficult to find qualified bakers nowadays, I want to spend more time teaching and developing our products." In fact, training became a strong coordination mechanism throughout the company. It has an orientation program, modules for front-of-store staff, coaching with production staff, and so forth.

The Merritt's Bakery case also refers to the increasing emphasis on coordination through standardization of processes. Specifically, Christian Merritt introduced flowcharts that guide employees through most aspects of their job duties without the need for direct supervision. The case does not discuss standardization through output,

although it likely existed in the form of production goals (e.g. time to serve customers, time to complete a cake decoration).

Finally, there is also some degree of coordination through hierarchy. Each store employed a store manager. The production center had supervisors who worked closely with staff. Larry (and likely Bobbie) also supervised employees throughout their leadership in this organization.

- 2. Describe how span of control, centralization, and formalization have changed at Merritt's Bakery over the years. Is the company's organizational structure today more mechanistic or organic? Are these three organizational structure elements well-suited to the company in their current form? Why or why not?**

Span of Control

The main information here is that the owners had increased span of control of front-of-store staff over the years. No mention of employing any supervisors even when there were 20 employees (not all on the job at the same time, though). As the company opened more stores, each operation had its own manager, which would have a set span of control. Again, we don't have the numbers. However, the case mentions that one or two managers at the production site coach up to five new hires, indicating that their span of control would be much higher than this (i.e. each manager also supervises experienced staff). We don't know the exact span of control, but generally it seems that this company's span suits its work activity. The exception might be if there are too many or too few supervisors in the production unit.

Centralization

This case is an excellent illustration of increasing decentralization as companies grow. In fact, a turning point in the company occurred when the owners realized that they could no longer perform the production work alone, so they "delegated" (decentralized) that work and responsibility to others. When a second and third store opened, Merritt's Bakery further decentralized operations. The owners no longer directly supervised all employees. There is also some indication of centralization when the production center opened. This might be considered centralization because these functions were now performed more closely to the owners rather than through the store managers. The production center had supervisors, but it seems that Larry, Bobbie, or both were also directly involved in leading the production group. Overall, the degree of decentralization seems to fit the nature of this business.

Formalization

Again, Merritt's Bakery is a wonderful case study on the evolution of formalization as companies grow. There were likely some procedures and rules established by the time the company opened its first large (6,000-foot) store, but we don't have those details. However, we do know that Merritt's Bakery introduced precise flow charts when Christian Merritt joined the business. These represent distinct forms of formalization that fit nicely into the mechanistic structure required for this type of work.

- 3. What form of departmentalization currently exists at Merritt's Bakery? Would you recommend this form of departmentalization to this company? Why or why not?**

Merritt's Bakery today has a functional organizational structure to the extent that employees are organized either into specific production positions or store activity positions. The store structure might be viewed by some students as a geographic structure, which it is to some extent. However, some front-of-store staff might rotate around different stores and all of them might report to the head of operations rather than just to the store manager. Also, the "geographic" dimension is not differentiating, unlike divisional geographic structures which are distinct from each other (e.g. Northeast US vs Southwest US division) and might have different services or products to suit each region's variations. It is somewhat difficult to evaluate the store structure due to lack of information. Students can focus on the wisdom of separating the production activities from the stores. Generally, this makes sense for efficiency and skill development purposes, particularly since (a) high quality is a competitive advantage for the company and (b) the product can be delivered quickly to the stores (i.e. located near each other).



TEAM EXERCISE: CLUB ED EXERCISE

This exercise was written by Cheryl Harvey and Kim Morouney at Wilfred Laurier University. These notes are partly based on their exercise comments in the original article, and partly on Steve McShane's class experiences.

Purpose

This exercise is designed to help students understand the issues to consider when designing organizations at various stages of growth.

Instructions

Students are placed in teams (typically four or five people). After reading Scenario #1 presented below, each team will design an organizational chart (departmentalization) that is most appropriate for this situation. Students should be able to describe the type of structure drawn and explain why it is appropriate. The structure should be drawn on an overhead transparency or flip chart for others to see during later class discussion. The instructor will set a fixed time (e.g., 15 minutes) to complete this task.

At the end of the time allowed, the instructor will present Scenario #2 and each team will be asked to draw another organizational chart to suit that situation. Again, students should be able to describe the type of structure drawn and explain why it is appropriate. This process is repeated for Scenario #3 and, if time is available, Scenario #4.

Only Scenario #1 (shown below) is presented in the textbook. The instructor will read the other scenarios (also shown below) at the appropriate times.

Scenario 1 (in textbook)

Determined never to shovel snow again, you are establishing a new resort business on a small Caribbean island. The resort is under construction and is scheduled to open one year from now. You decide it is time to draw up an organizational chart for this new venture, called Club Ed.

Scenario #2

It is now seven years later. Your resort has been wildly successful. Through profits and investment from a silent partner, Club Ed now owns resorts – two in the Caribbean, two in Mexico, and one in the South Pacific. Draw an up-to-date organizational chart and answer the questions above in Step 1.

Scenario #3

Ten years later, you and your partners own 80 Club Ed resorts in North, Central, and South America, the Caribbean, and South Pacific. The company also operates a cruise ship. Draw an up-to-date organizational chart for Club Ed and answer the questions above in Step 1.

Scenario #4

Ten more years have passed. The Club is now has 112 resorts and 3 cruise ships. A recent customer profile shows that almost 50% of its customers are repeat business and are older than 40 years old. The three "S's" (sun, sand, and sex) marketing theme is out of date in a world where AIDS and fears of skin cancer are all too real. This has contributed to fewer guests over each of the past three years. Moreover, North America and Europe are entering a recession, which will further reduce demand for Club Ed's services. How does Club Ed adapt to these new realities? Diagram the company's organizational chart and answer the questions above in Step 1. In particular, be prepared to discuss Club Ed's new structure in terms of its new business strategy.

Discussion Questions

1. **How does the Club Ed's organizational structure change as it grows and diversifies? What factors drive these structural changes?**
2. **How can Club Ed structure itself as an adaptive organization? Does it always have to react to environmental changes or are there some ways it can be proactive?**

Comments to Instructors

At last! A team exercise on organizational structure that students thoroughly enjoy. I have used this exercise in several classes since it was published in 1998. In every class, students were completely involved and challenged by the activity. These students ranged from mid-20s graduate students to 30s and 40s managers to military officers. They all enjoy it, as far as I could tell from the class activity. From my many years with undergraduate students, I would suggest that this exercise is just as much fun for them.

Usually, students develop a functional structure in the first scenario. A couple of teams might suggest a simple structure, assuming that the resort is very small. You might also get a few developing a team-based structure where everyone is multi-skilled.

In Scenario #2, most groups form a geographical divisional structure. It is useful to question them on this, asking whether this structure adds an unnecessary layer, whereas all five resort managers could report directly to the CEO. Students then debate at what stage (size, complexity) an organization should form a divisional structure.

In Scenario #3, teams develop a divisionalized structure around geography. The cruise ship is an odd configuration that some teams have trouble placing in the structure. Should it be its own division, or under the regional head where it usually sails? Most teams will consider the five regions listed as the natural grouping. However, you might ask whether they should assume that one regional head could manage a region with many resorts. Similarly, you might ask whether all 80 resorts could report directly to one person. Students should explain why they organized by geography rather than customer or function. For instance, why not have a vice-president responsible for all food services in all resorts?

Scenario #4 raises some interesting variations in the structures presented. Many see the need for differentiation by client group rather than geography.

Further Suggestions

When doing this exercise, I recommend that you give each team enough overhead transparencies so that they can present their structure quickly on the overhead projector.

You can also change the conditions, perhaps bringing in more cruise ships earlier or expanding product lines into fitness centers. The possibilities are endless!



SELF-ASSESSMENT: WHAT ORGANIZATIONAL STRUCTURE DO YOU PREFER?

Purpose

This exercise is designed to help students understand how an organization's structure influences the personal needs and values of people working in that structure.

Overview and Instructions

Personal values influence how comfortable we are working in different organizational structures. Some people prefer an organization with clearly defined rules or no rules at all. Others prefer a firm where almost any employee can make important decisions, or where important decisions are screened by senior executives. This self-assessment is designed to help students estimate the type of organizational structure in which they would prefer to work based on their personal needs and values.

Students are asked to read each statement in this self-assessment and indicate how well the statement reflects the type of organization in which they would prefer to work. Students need to complete each item honestly to get the best estimate of their preferred organizational structure. This instrument has 15 statements.

Feedback for the Preferred Organizational Structure Instrument

This self-assessment estimates the extent to which students prefer a mechanistic or organic structure, as well as the three dimensions of a mechanistic structure: tall hierarchy, formalization, and centralization. The tables reflect norms based on a sample of over 200 MBA students. Cultural, occupational, and age differences might make the norms less relevant to some students.

Tall hierarchy: People with high scores on this dimension prefer to work in organizations with several levels of hierarchy and a narrow span of control (few employees per supervisor). Scores on this subscale range from 0 to 15. The average score among a sample of MBA students was 7.8.

Score	Interpretation
11 to 15	Strong preference for tall hierarchy
6 to 10	Average preference for tall hierarchy
0 to 5	Low preference for tall hierarchy

Formalization: People with high scores on this dimension prefer to work in organizations where jobs are clearly defined with limited discretion. Scores on this subscale range from 0 to 15. The average score among a sample of MBA students was 9.4.

Score	Interpretation
12 to 15	Strong preference for formalization
9 to 11	Average preference for formalization
0 to 8	Low preference for formalization

Centralization: People with high scores on this dimension prefer to work in organizations where decision making occurs mainly among top management rather than spread out to lower level staff. Scores on this subscale range from 0 to 15. The average score among a sample of MBA students was 7.7.

Score	Interpretation
10 to 15	Strong preference for centralization
7 to 9	Average preference for centralization
0 to 6	Low preference for centralization

Mechanistic Structure Preference (Total Score): People with high scores on this overall score prefer to work in mechanistic organizations, whereas those with low scores prefer to work in organic organizational structures. Mechanistic structures are characterized by a narrow span of control and high degree of formalization and centralization. Organic structures have a wide span of control, little formalization, and decentralized decision making. Scores on this subscale range from 0 to 45. The average score among a sample of MBA students was 24.9.

Score	Interpretation
30 to 45	Strong preference for mechanistic structure
22 to 29	Average preference for mechanistic structure
0 to 21	Low preference for mechanistic structure