Organizational Design

Design of Microstructure

Michele Piazzai

Universidad Carlos III de Madrid
Depto. Economía de la Empresa
michele.piazzai@uc3m.es
piazzai.github.io

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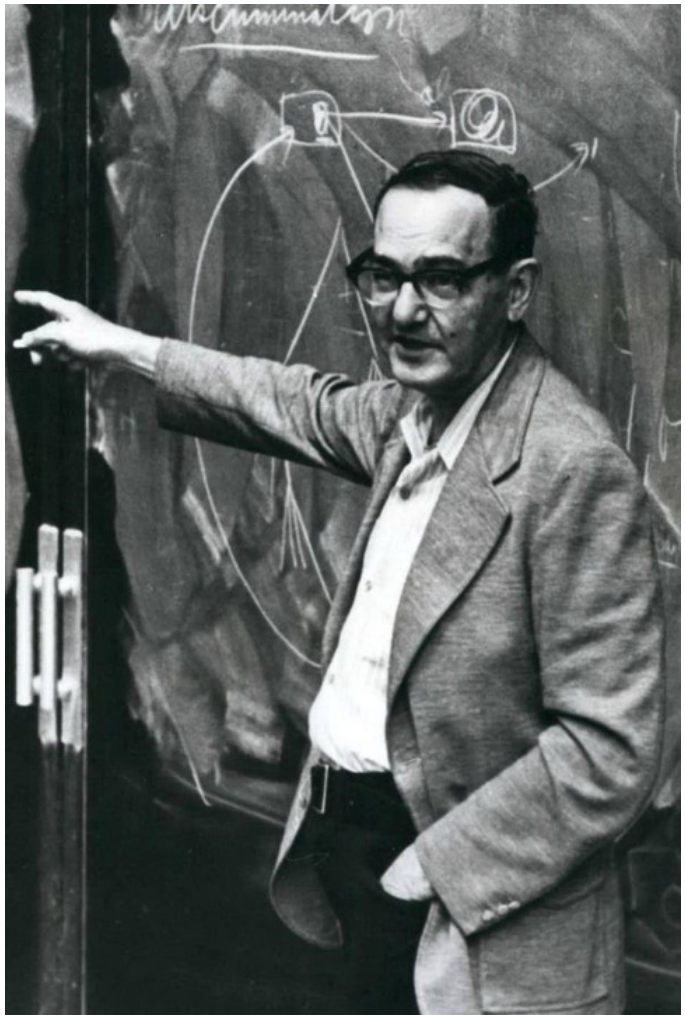
Back to design

Design assumes discretion, or ability to alter a system

A designer devises courses of action that change the system in desirable ways

Design, so construed, is the core of all professional training, from business to medicine, architecture, and law



Nine questions

1. How many tasks are in each job, and how narrow?
2. To what extent should tasks be standardized?
3. What skills and knowledge are needed for a job?
4. On what basis should jobs or units be grouped?
5. How large should each unit be?
6. To what extent should outputs be standardized?
7. What should mutual adjustment be facilitated?
8. How much power is given to middle managers?
9. How much power is given to staffers?

Nine parameters

1. Specialization
2. Behavior formalization
3. Training and indoctrination
4. Unit grouping
5. Unit size
6. Planning and control systems
7. Liaison devices
8. Vertical decentralization
9. Horizontal decentralization

Microstructure

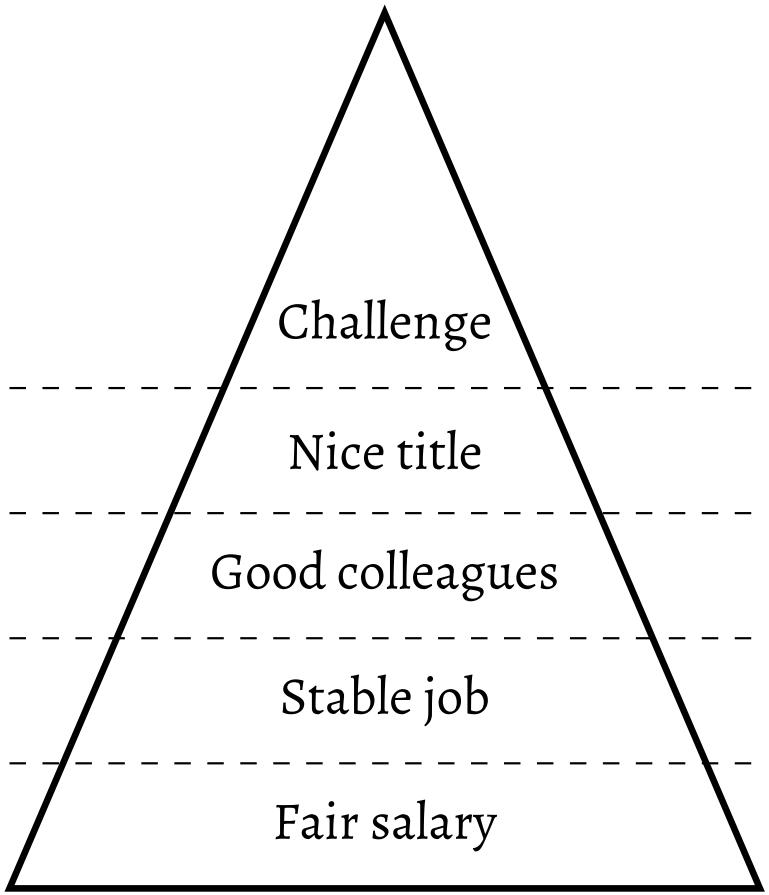
Defining motivation

The set of processes (simple or complex, extrinsic or intrinsic) that originate, direct, and sustain human behavior toward a goal

Maslow's hierarchy

Application to the workplace

- Self-actualization
  - Learning, improving
- Esteem needs
  - Status and pride
- Social needs
  - Friendship
- Safety needs
  - Predictability
- Physiological needs
  - Food and shelter



Alderfer's ERG theory

- **E**xistence needs
  - Physiology and security
- **R**elatedness needs
  - Social relationships, sense of belonging
  - Status and pride (extrinsic esteem)
- **G**rowth needs
  - Positive self-image (intrinsic esteem)
  - Self-improvement and actualization

Difference with Maslow

Greater satisfaction of lower-order needs offsets smaller satisfaction of higher-order needs

McGregor's X and Y

☹	☺
Work is boring and must be avoided	Work is interesting and can be enjoyed
Direction is given through coercion	Workers self-direct toward accepted goals
Workers dislike and skirt responsibility	Workers thrive when given responsibility
Work is motivated by monetary incentives	Motivation is due to desire to contribute
Workers use creativity only to find loopholes	Workers are creative given the opportunity

Herzberg's two-factor theory

- Satisfaction is driven by *motivators*
  - Chance of self-improvement, impact
  - Mostly due to conditions internal to jobs
- Dissatisfaction is driven by *hygiene factors*
  - Fairness, stability, friendliness
  - Mostly due to conditions external to jobs
- A dual-variable theory
  - Satisfaction unaffected by hygiene factors
  - Dissatisfaction unaffected by motivators
  - Positive attitude and productivity are not opposites

Implications for structure

- Motivation can be manipulated
  - Task identity and complexity
  - Autonomy, responsibility, feedback
- Possible complications
  - Past performance, reference group

Job-related parameters

Specialization: horizontal or vertical division of labor
Formalization: standardization of work processes
Training and indoctrination: standardization of skills

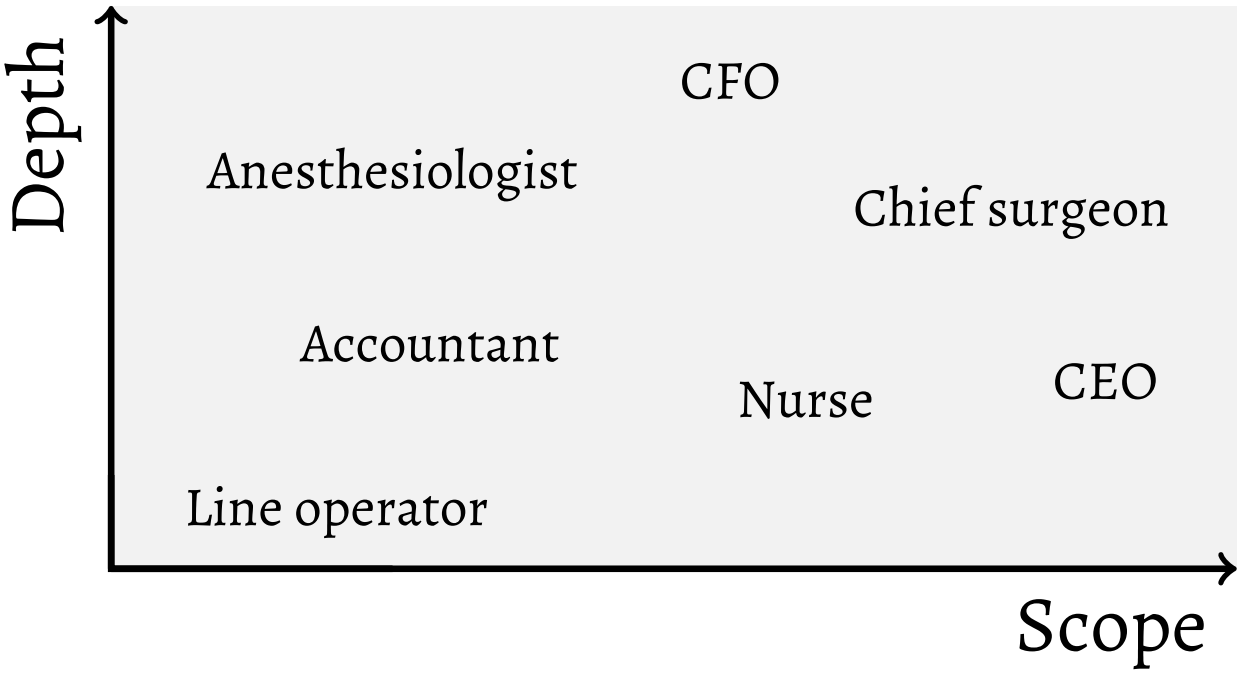
The trade of pin makers

> One man draws out the wire, another straightens it, a third man cuts it, a fourth points it, a fifth grinds it at the top for receiving the head
>
> The important business of making a pin is in this way divided into many distinct operations, which, in some factories, are all performed by distinct hands
>
> So ten men specialized in their work are able to turn out about 4800 pins in a day; but working separately and independently, they cannot each make twenty, or perhaps even one in a day

Smith, *The Wealth of Nations*, 1776

Two kinds of specialization

- Horizontal, referring to the *scope* (variety) of a job
- Vertical, referring to the *depth* (autonomy) of a job



Horizontal specialization

- By far the predominant form of division of labor
  - Enabled by economies of scale
- Repetition increases productivity
  - Greater dexterity
  - No switching costs
  - Better tools and methods
  - Tasks matched to workers
- It can decrease satisfaction
  - Breaking of task identity ⟶ Low motivation
- It can increase dissatisfaction
  - Loss of control over work ⟶ Low hygiene

Vertical specialization

- Gives rise to administrative work
  - Those who supervise
  - Those who standardize
- Follows horizontal specialization
  - Coordination needed for narrow tasks
  - Broader perspective required for consistency
  - Control transferred to managers and analysts
- Fails to make proper use of human resources

"All possible brain work should be removed from the shop floor [so as to] minimize the characteristics of workers that [...] differentiate them from machines."

Job enlargement (I)

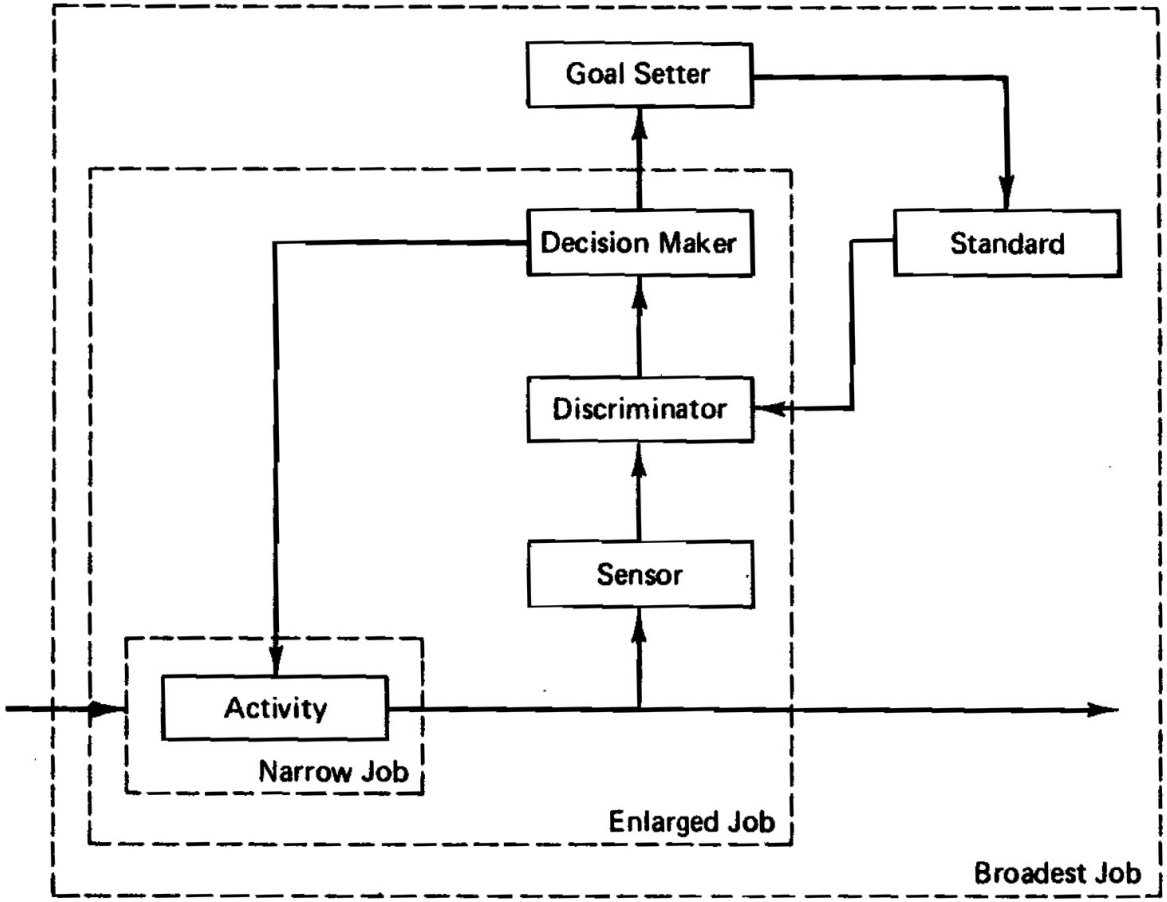


Figure 4-1. *Basic Work Control Cycle (adapted from Litterer, 1965, p. 237 ff)*

Job enlargement (II)

- Opposite of specialization
  - Horizontal, when adding more tasks
  - Vertical, when allowing choice of tasks
- Increases job satisfaction
  - Task identity, challenge, career opportunities
- Benefits highly dependent on context
  - Greater motivation vs lower efficiency
  - High quality work but low productivity
- Also dependent on the nature of workers
  - Tolerance for ambiguity
  - Self-identification with work

Job rotation

- Involves changing workers, not tasks
  - Applicable at all levels of hierarchy
  - Not feasible in some industries, like healthcare
- Advantages
  - Adds variety without changing workflow
  - Learning and career development
  - Better identification of star employees
- Disadvantages
  - Costs of setting up rotation program
  - Time lost to switching tasks
  - Not necessarily enjoyable

Specialization by parts

- Core and staff
  - High horizontal
  - High V if unskilled
  - Low V if professional
- Strategic apex
  - Low horizontal
  - Low vertical
- Middle line
  - High vertical
  - High H toward core
  - Low H toward apex

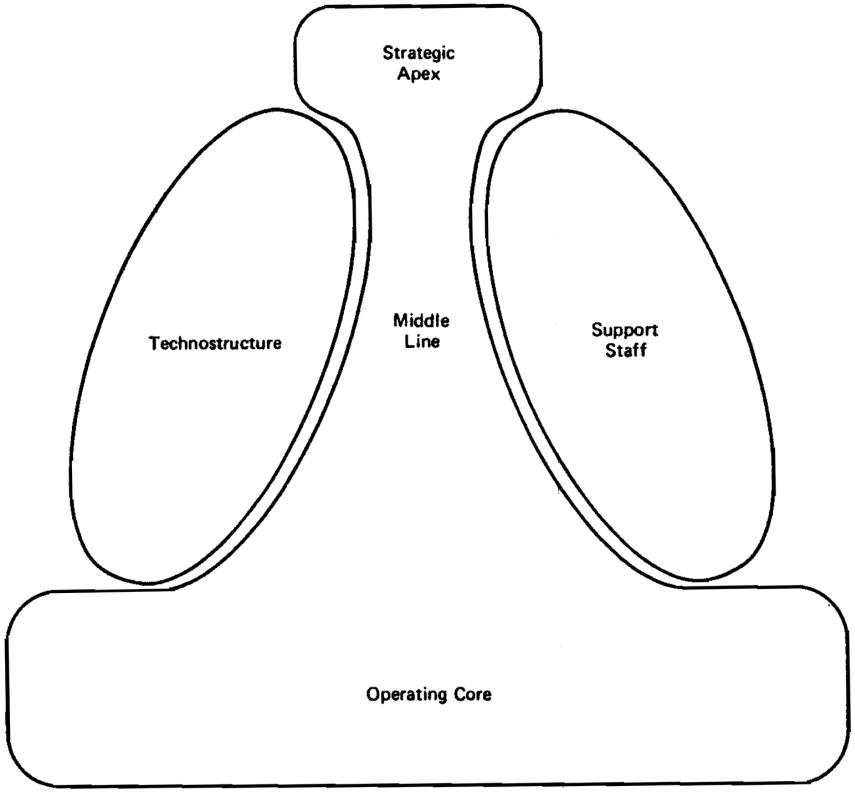


Figure 2-1. *The Five Basic Parts of Organizations*

Three ways of formalizing

By job

Specifying what steps to take and in what sequence; generally included in formal job description

By workflow

Specifying how to perform particular work, while the job as a whole remains vague (e.g., musical scores)

By rules

Specifying who can do what, when, where, and with whose permission; written in a policy manual

Advantages

- Formalization regulates behavior
  - Control moves to analysts ⟶ Vertical specialization
  - Lower variability in quality and quantity
  - Predictability and accountability
- Facilitates precise coordination
  - Military units
  - Airplane crews
  - Post services
- Also important to avoid nepotism
  - Core to Weber's bureaucracy
  - Favored by government and public organizations

Disadvantages

- Creates mechanistic organizations
  - Rigid and efficient, but fragile
  - Lower survival in changing environments
- Destroys manager-worker relations
  - Shifts power to analysts
  - Less social interaction
  - Encourages focus on own goals
- Makes the workplace an “iron cage”
  - Automatic rejection of innovative ideas
  - Mistreatment of customers
  - Absenteeism, soldiering, work-to-rule

Vicious circles

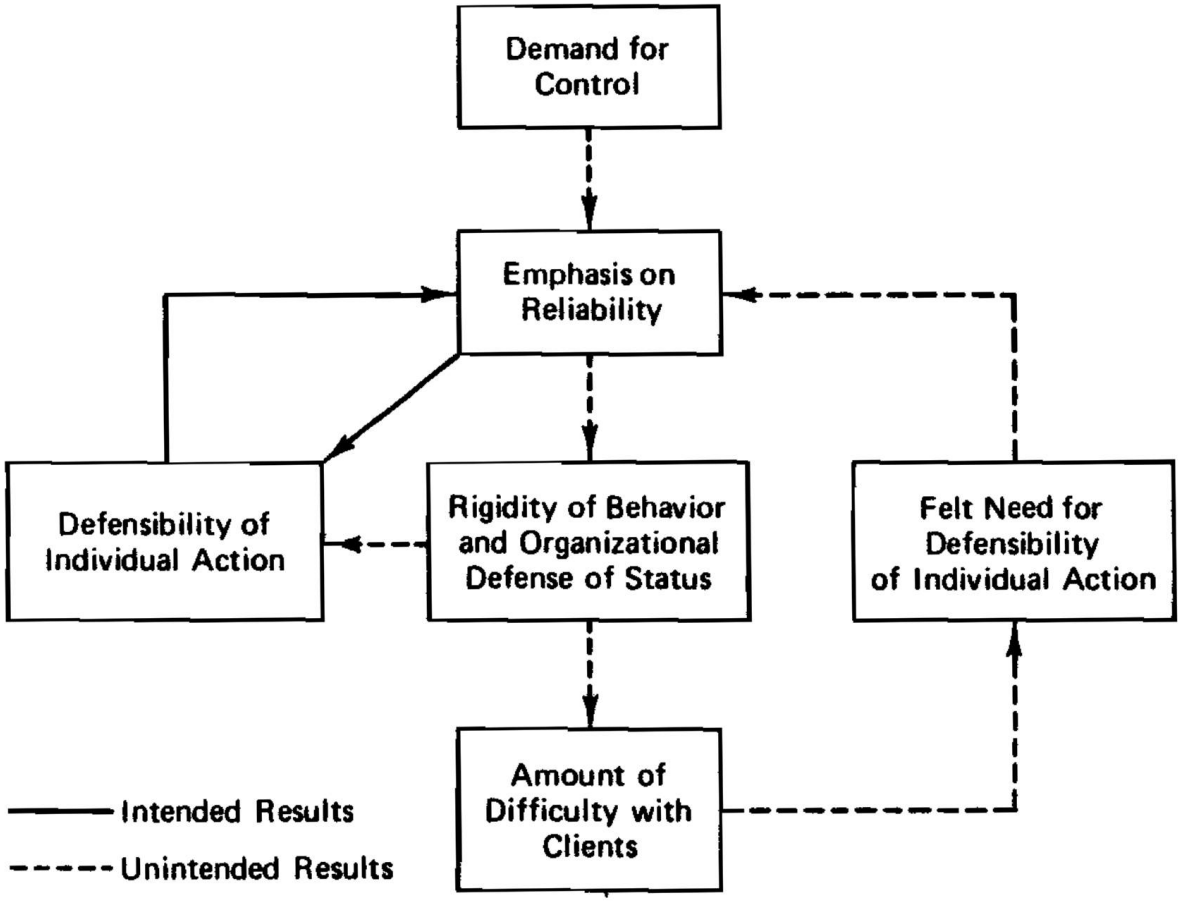


Figure 5-1. *The Consequences of Excessive Formalization of Behavior: "The Simplified Merton Model" (as presented by March and Simon, 1958, p. 41)*

Mechanistic vs organic structures

Workers are separated and highly specialized	Workers are together and change/rotate tasks
Formal authority and unity of command	Cross-functional teams and task forces
Decision-making is very centralized	Decision-making is decentralized
Written standards and operating rules	Face-to-face contact and verbal interaction
Status driven by position in hierarchy	Status driven by personal achievements

A possible compromise

Formalization by parts

- Operating core
  - Extremely high
- Strategic apex
  - Extremely low
- Staff units
  - High toward core
  - Low toward apex
- Middle line
  - Same as staff units
  - High in production
  - Low in marketing

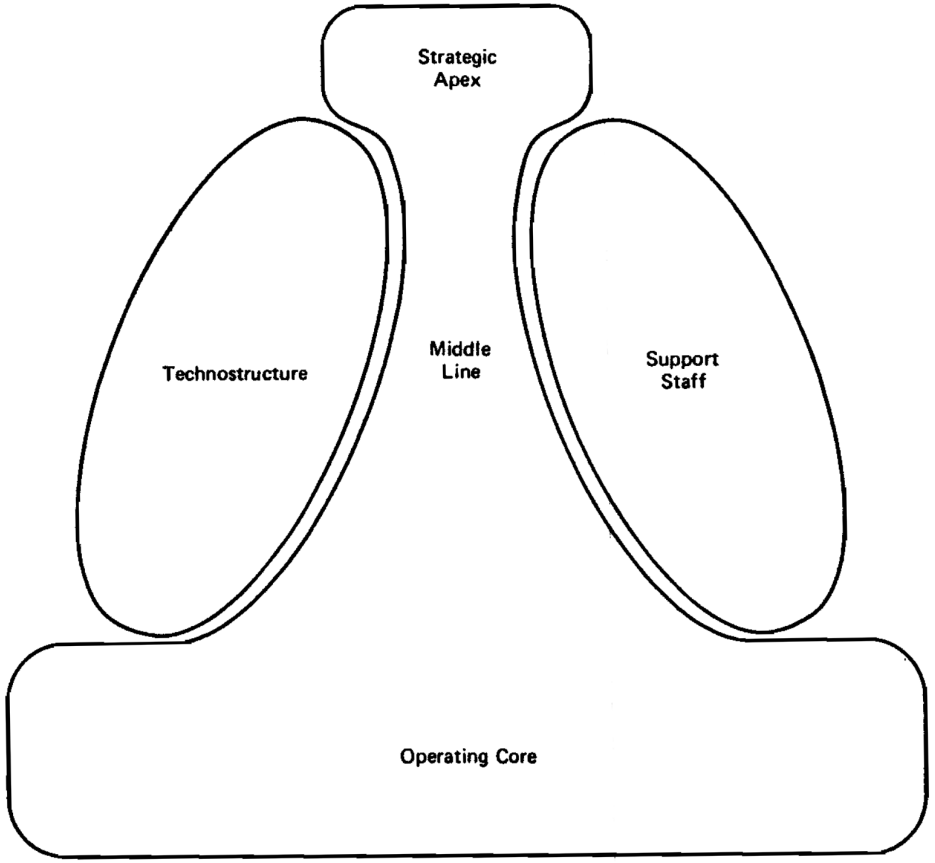


Figure 2-1. *The Five Basic Parts of Organizations*

Organizational culture (I)

Organizational culture (II)

Only people with an ardent love for the outdoors are recruited: nine in ten are graduates from forestry schools; many held summer jobs in the forests

They share common lore, technical knowledge, and identification even before ranger training

When they become rangers, they move from post to post, not necessarily upward, to keep their loyalties and career interests centrally directed

Wilensky, *Organizational Intelligence*, 1987

Culture and indoctrination

The process by which one learns the values and norms of a group is **socialization**

The parameter used to socialize workers for an organization's own benefit is called **indoctrination**

- Mostly happens outside the organization
- Some happens before new hires start their jobs
  - Apprenticeships, internships
  - Rotations through departments
- Some happens later
  - Rotations through foreign subsidiaries

Differences with formalization

> "Jesuit priests are not constantly being rung up, or sent memos, by the head office of the Society."

- Two ways of exercising control over workers
  - With formalization, workers are explicitly directed
  - With indoctrination, they *seem* to act autonomously
- Loyalty goes to source of control
  - Formalization becomes unnecessary and unwanted
- Two kinds of bureaucracies
  - Emphasis on formalization → Machine bureaucracy
  - Emphasis on indoctrination → Professional bureaucracy

Indoctrination by parts

- Operating core
  - Low if unskilled
  - High if professional
- Staff units
  - Relatively high
- Apex and middle line
  - Relatively low
  - Slowly increasing

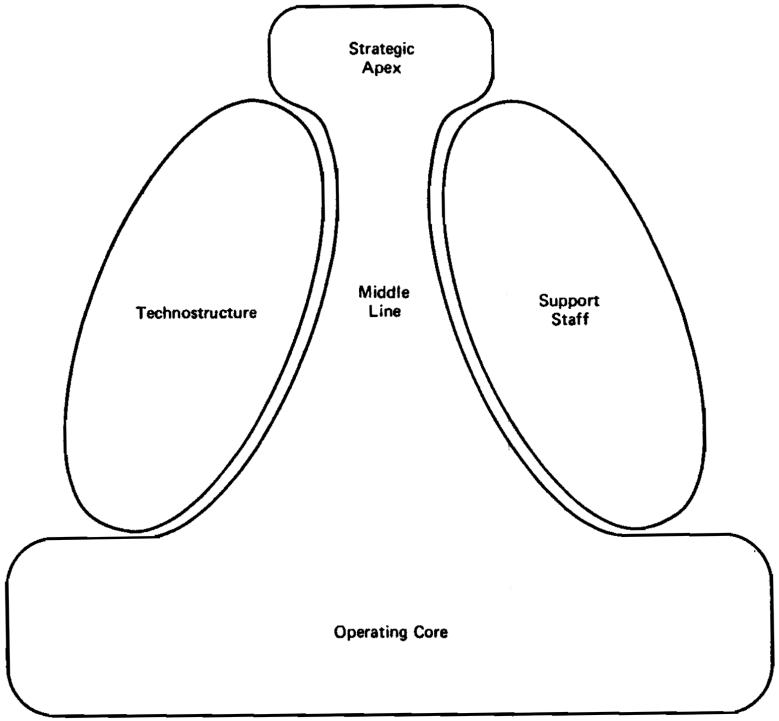


Figure 2-1. *The Five Basic Parts of Organizations*

Readings

Mintzberg 1979, ch. 4–6