

UCS1704 – Management and Ethical Practices

**Evolution of Management, Scientific, Human
Relations, System and Contingency Approaches**

Semester – VII

Dr. G. Raghuraman, Associate Professor/CSE



OUTLINE

- **Historical Background of Management**
 - Explain why studying management history is important.
 - Describe some early evidences of management practice.
- **Scientific Management**
 - Describe the important contributions made by Fredrick W. Taylor and Frank and Lillian Gilbreth.
 - Explain how today's managers use scientific management.

OUTLINE (cont'd)

- **General Administrative Theory**
 - Discuss Fayol's contributions to management theory.
 - Describe Max Weber's contribution to management theory.
 - Explain how today's managers use general administrative theory.
- **Quantitative Approach**
 - Explain what the quantitative approach has contributed to the field of management.
 - Discuss how today's managers use the quantitative approach.

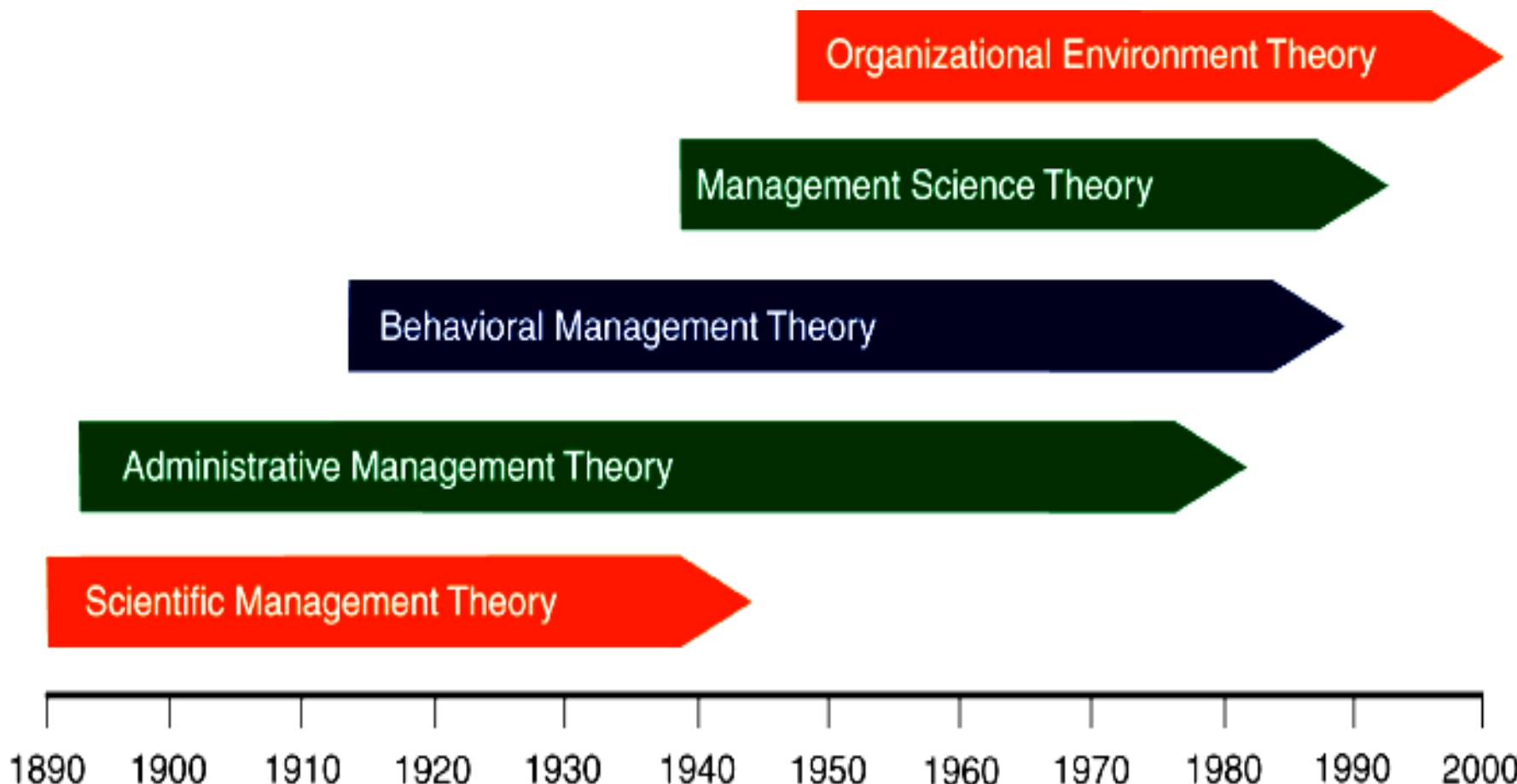
OUTLINE (cont'd)

- **Toward Understanding Organizational Behavior**
 - Describe the contributions of the early advocates of OB.
 - Explain the contributions of the Hawthorne Studies to the field of management.
 - Discuss how today's managers use the behavioral approach.
- **The Systems Approach**
 - Describe an organization using the systems approach.
 - Discuss how the systems approach helps us management.

OUTLINE (cont'd)

- **The Contingency Approach**
 - Explain how the contingency approach differs from the early theories of management.
 - Discuss how the contingency approach helps us understand management.

The Evolution of Management Theory



Historical Background of Management

- Ancient Management
 - Egypt (pyramids) and China (Great Wall)
 - Venetians (floating warship assembly lines)
- Adam Smith
 - Published “*The Wealth of Nations*” in 1776
 - ❖ Advocated the division of labor (job specialization) to increase the productivity of workers
- Industrial Revolution
 - Substituted machine power for human labor
 - Created large organizations in need of management

Job Specialization and the Division of Labor

Adam Smith (18th century economist)

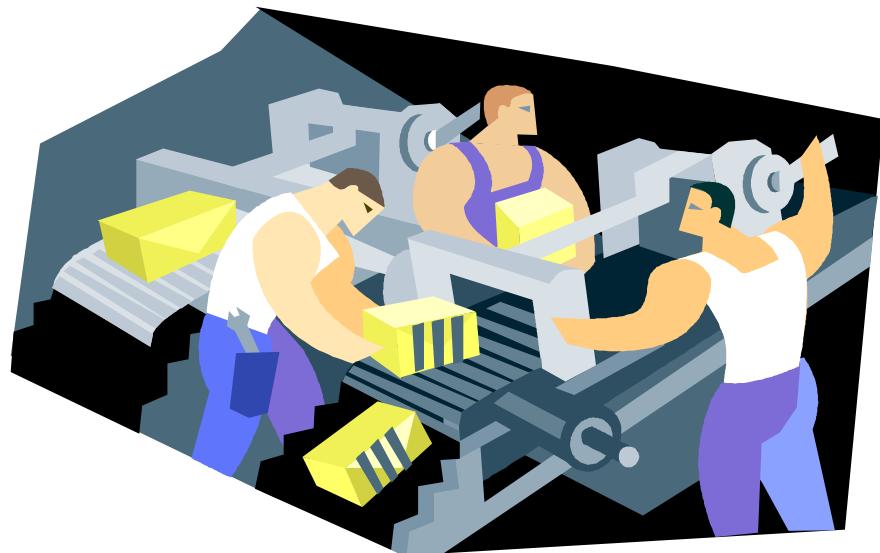
➤ Observed that firms manufactured pins in one of two different ways:

- Craft-style—each worker did all steps.
- Production—each worker specialized in one step.

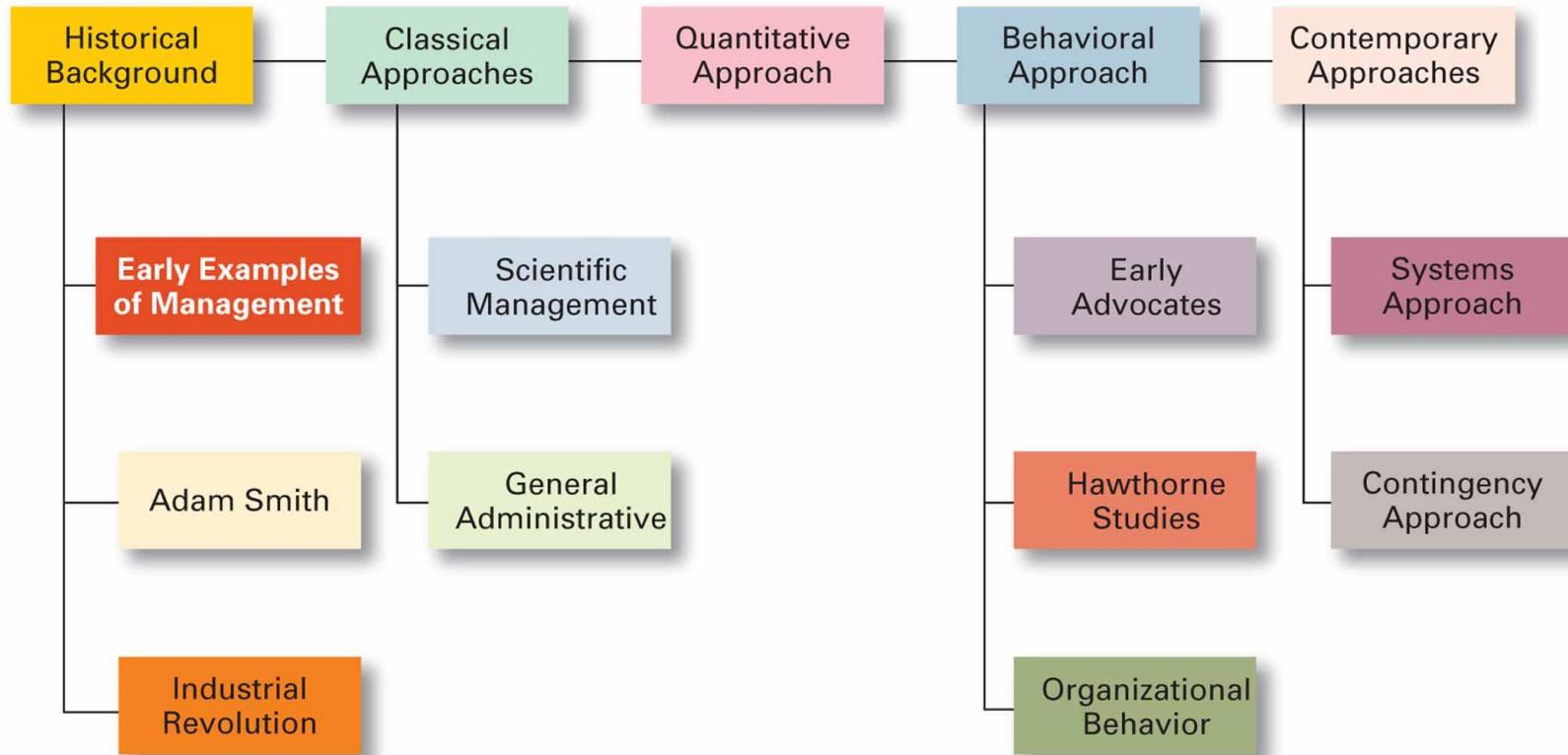
Job Specialization and the Division of Labor

Adam Smith (18th century economist)

- Realized that job specialization resulted in much higher efficiency and productivity
 - ❖ Breaking down the total job allowed for the division of labor in which workers became very skilled at their specific tasks.



Major Approaches to Management



Major Approaches to Management

- Classical
- Quantitative
- Behavioral
- Contemporary



Scientific Management

- Fredrick Winslow Taylor
 - The “father” of scientific management
 - Published *Principles of Scientific Management* (1911)
 - ❖ The theory of scientific management
 - Using scientific methods to define the “one best way” for a job to be done:
 - Putting the right person on the job with the correct tools and equipment.
 - Having a standardized method of doing the job.
 - Providing an economic incentive to the worker.

Taylor's Four Principles of Management

- 1. Develop a science for each element of an individual's work, which will replace the old rule-of-thumb method.**
- 2. Scientifically select and then train, teach, and develop the worker.**
- 3. Heartily cooperate with the workers so as to ensure that all work is done in accordance with the principles of the science that has been developed.**
- 4. Divide work and responsibility almost equally between management and workers. Management takes over all work for which it is better fitted than the workers.**

Scientific Management (cont'd)

- Frank and Lillian Gilbreth
 - Focused on increasing worker productivity through the reduction of wasted motion
 - Developed the microchronometer to time worker motions and optimize work performance
- How Do Today's Managers Use Scientific Management?
 - Use time and motion studies to increase productivity
 - Hire the best qualified employees
 - Design incentive systems based on output

Discussion

- Quality Advocates
 - **HENRY L. GANTT.**
 - **WALTER A. SHEWHART.**
 - **KAORU ISHIKAWA.**
 - **W. EDWARDS DEMING.**
 - **JOSEPH M. JURAN.**
 - **ARMAND V. FEIGENBAUM.**
 - **PHILIP B. CROSBY.**
 - **ELTON MAYO.**
 - **C.K. PRAHALAD.**

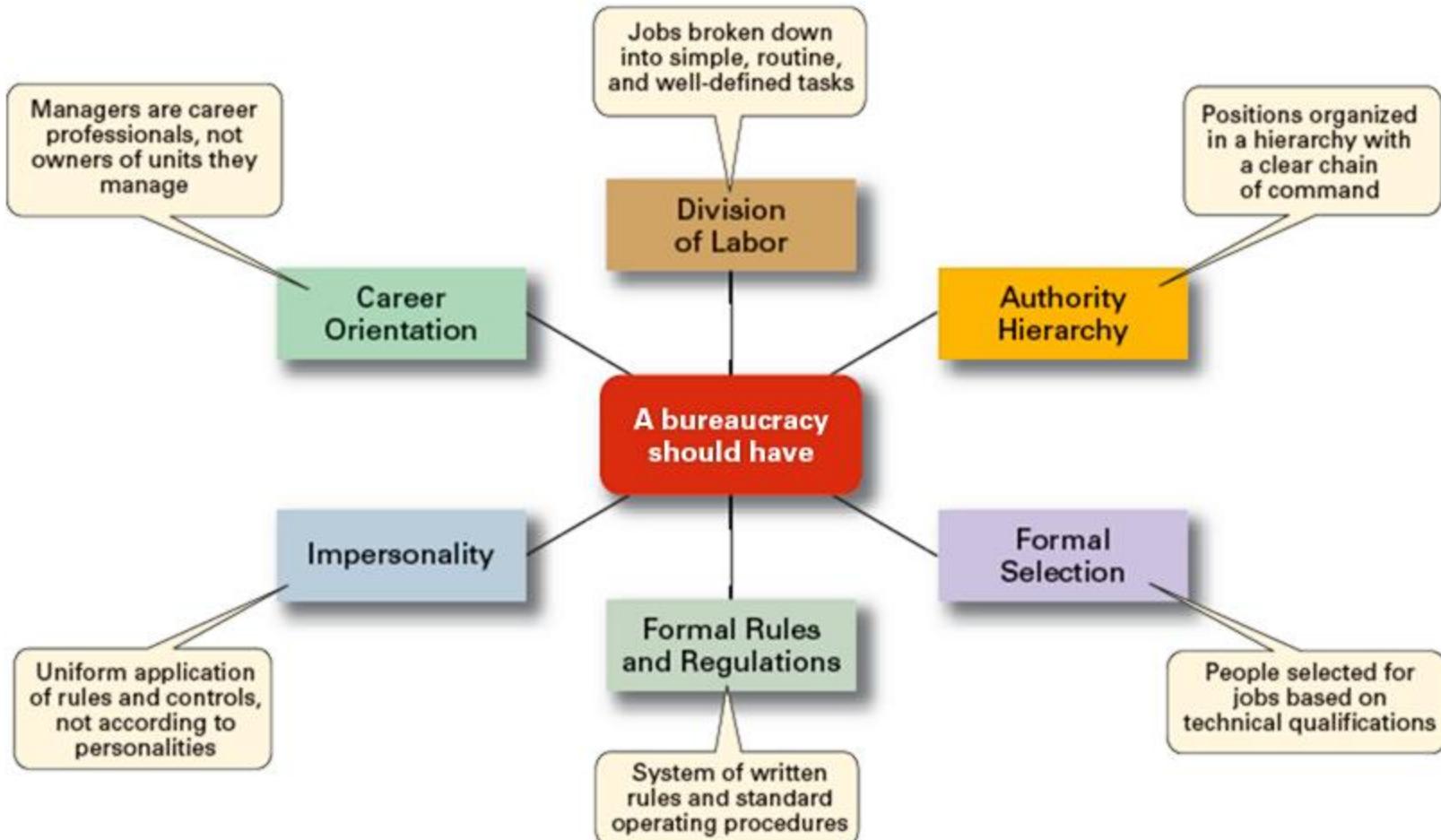
General Administrative Theory

- Henri Fayol
 - Believed that the practice of management was distinct from other organizational functions
 - Developed fourteen principles of management that applied to all organizational situations
- Max Weber
 - Developed a theory of authority based on an ideal type of organization (bureaucracy)
 - ❖ Emphasized rationality, predictability, impersonality, technical competence, and authoritarianism

Rules, SOPs and Norms

- **Rules** – formal written instructions that specify actions to be taken under different circumstances
- **Standard Operating Procedures (SOPs)** – specific sets of written instructions about how to perform a certain aspect of a task
- **Norms** – unwritten, informal codes of conduct that prescribe how people should act in particular situations

Weber's Ideal Bureaucracy



Fayol's 14 Principles of Management

- 1. Division of work.**
- 2. Authority.**
- 3. Discipline.**
- 4. Unity of command.**
- 5. Unity of direction.**
- 6. Subordination of individual interests to the general interest.**
- 7. Remuneration.**
- 8. Centralization.**
- 9. Scalar chain.**
- 10. Order.**
- 11. Equity.**
- 12. Stability of tenure of personnel.**
- 13. Initiative.**
- 14. Esprit de corps.**

Comradeship, shared enthusiasm foster devotion to the common cause (organization).

Quantitative Approach to Management

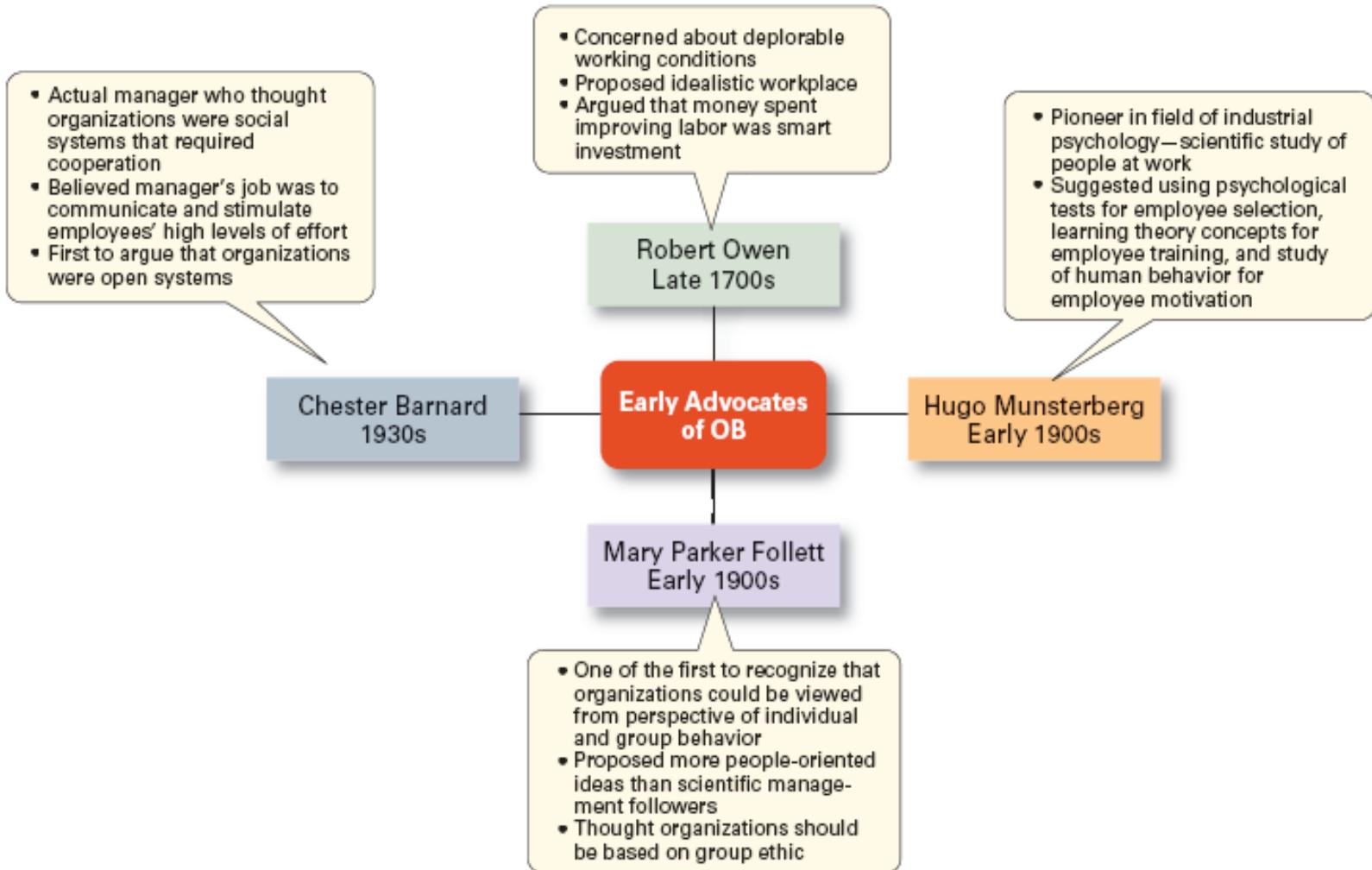
- Quantitative Approach
 - Also called *operations research* or *management science*
 - Evolved from mathematical and statistical methods developed to solve WWII military logistics and quality control problems
 - Focuses on improving managerial decision making by applying:
 - ❖ Statistics, optimization models, information models, and computer simulations

Understanding Organizational Behavior

- Organizational Behavior (OB)
 - The study of the actions of people at work; people are the most important asset of an organization
- Early OB Advocates
 - Robert Owen
 - Hugo Munsterberg
 - Mary Parker Follett
 - Chester Barnard



Early Advocates of OB



The Hawthorne Studies

- A series of productivity experiments conducted at Western Electric from 1927 to 1932.
- Experimental findings
 - Productivity unexpectedly increased under imposed adverse working conditions.
 - The effect of incentive plans was less than expected.
- Research conclusion
 - Social norms, group standards and attitudes more strongly influence individual output and work behavior than do monetary incentives.

Theory X and Theory Y

Douglas McGregor proposed the two different sets of assumptions about workers.

- Theory X assumes the average worker is lazy, dislikes work and will do as little as possible.
 - ❖ Managers must closely supervise and control through reward and punishment.

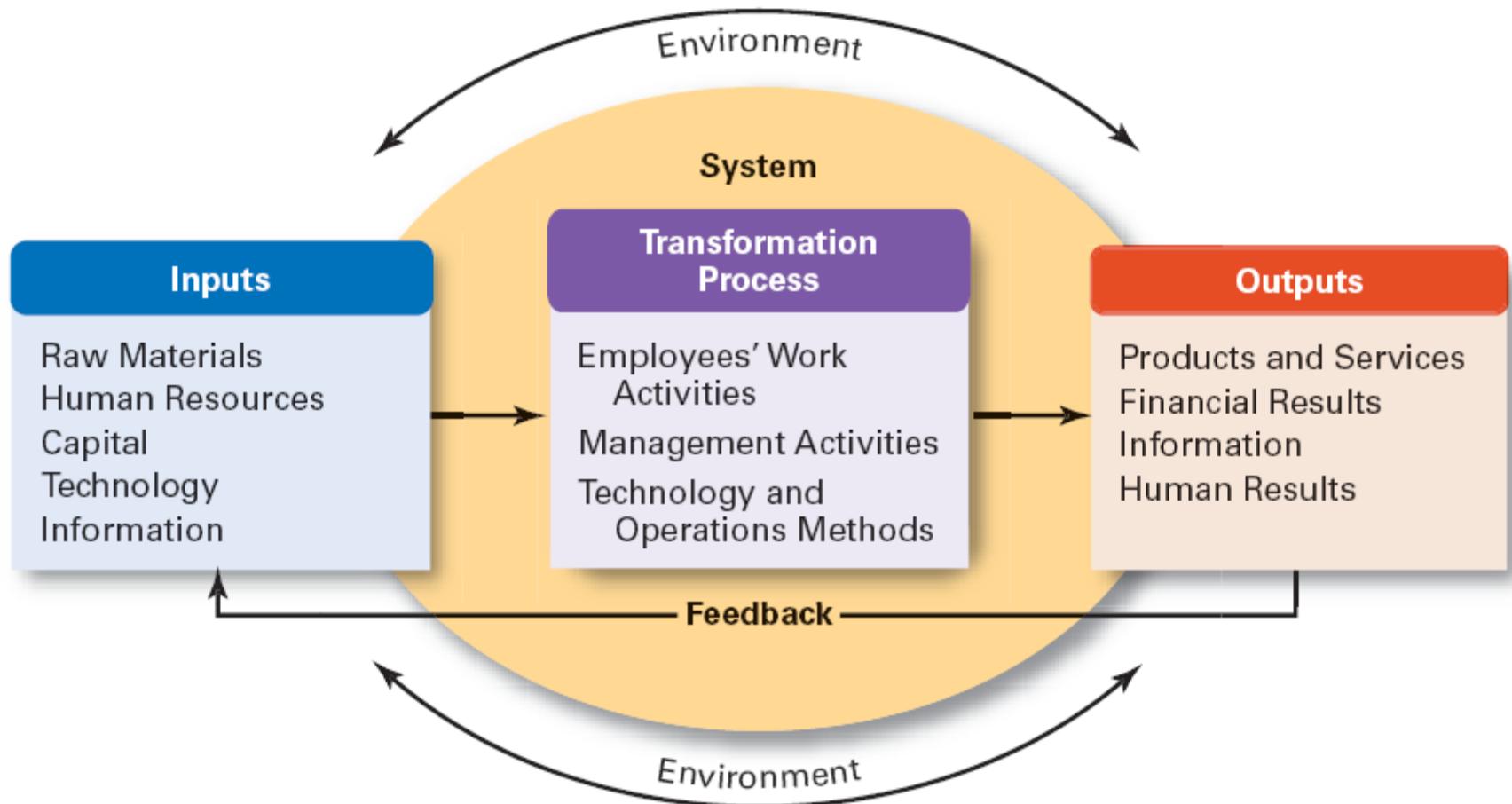
Theory X and Theory Y

- Theory Y assumes workers are not lazy, want to do a good job and the job itself will determine if the worker likes the work.
 - ❖ Managers should allow workers greater latitude, and create an organization to stimulate the workers.

The Systems Approach

- System Defined
 - A set of interrelated and interdependent parts arranged in a manner that produces a unified whole.
- Basic Types of Systems
 - Closed systems
 - ❖ Are not influenced by and do not interact with their environment (all system input and output is internal).
 - Open systems
 - ❖ Dynamically interact to their environments by taking in inputs and transforming them into outputs that are distributed into their environments.

The Organization as an Open System



Implications of the Systems Approach

- Coordination of the organization's parts is essential for proper functioning of the entire organization.
- Decisions and actions taken in one area of the organization will have an effect in other areas of the organization.
- Organizations are not self-contained and, therefore, must adapt to changes in their external environment.

The Contingency Approach

- Contingency Approach Defined
 - Also sometimes called the *situational approach*.
 - There is no one universally applicable set of management principles (rules) by which to manage organizations.
 - Organizations are individually different, face different situations (contingency variables), and require different ways of managing.

Popular Contingency Variables

- **Organization size**
 - As size increases, so do the problems of coordination.
- **Routineness of task technology**
 - Routine technologies require organizational structures, leadership styles, and control systems that differ from those required by customized or nonroutine technologies.
- **Environmental uncertainty**
 - What works best in a stable and predictable environment may be totally inappropriate in a rapidly changing and unpredictable environment.
- **Individual differences**
 - Individuals differ in terms of their desire for growth, autonomy, tolerance of ambiguity, and expectations.

Discussion

- Studies / Effects on Management

- Hawthorne Effect
- The John Henry effect
- Jastrow's effect
- The Pygmalion effect
- The Charisma effect
- The Halo effect
- The Placebo effect

Questions?