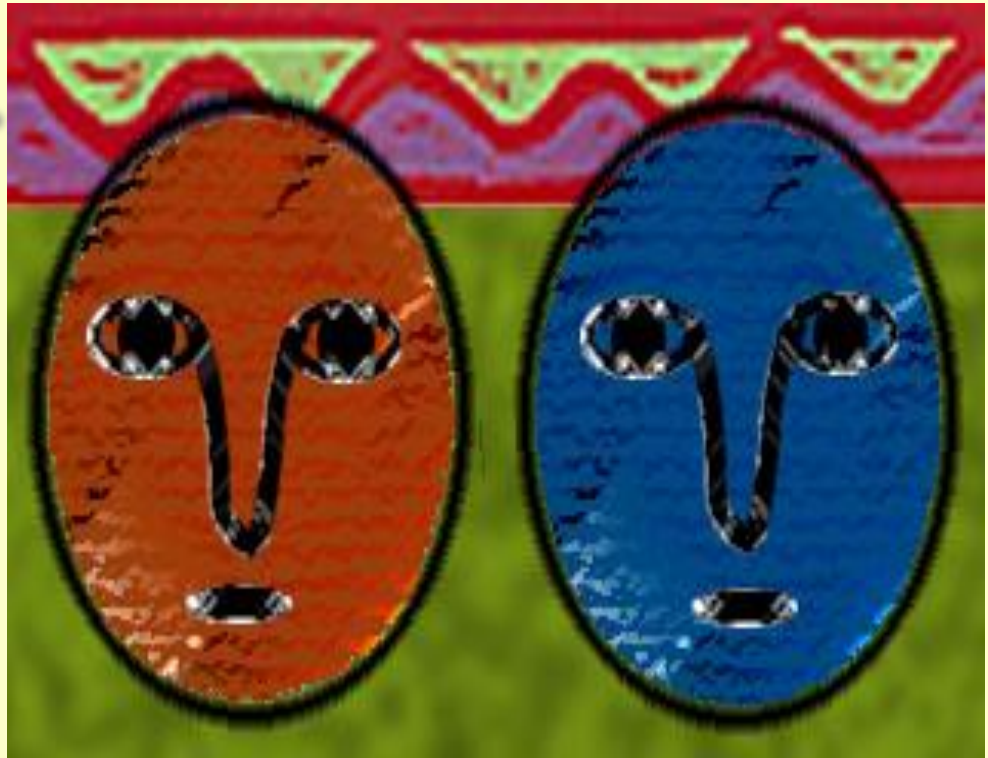


The Evolution of Management Theory



Scientific Management theory

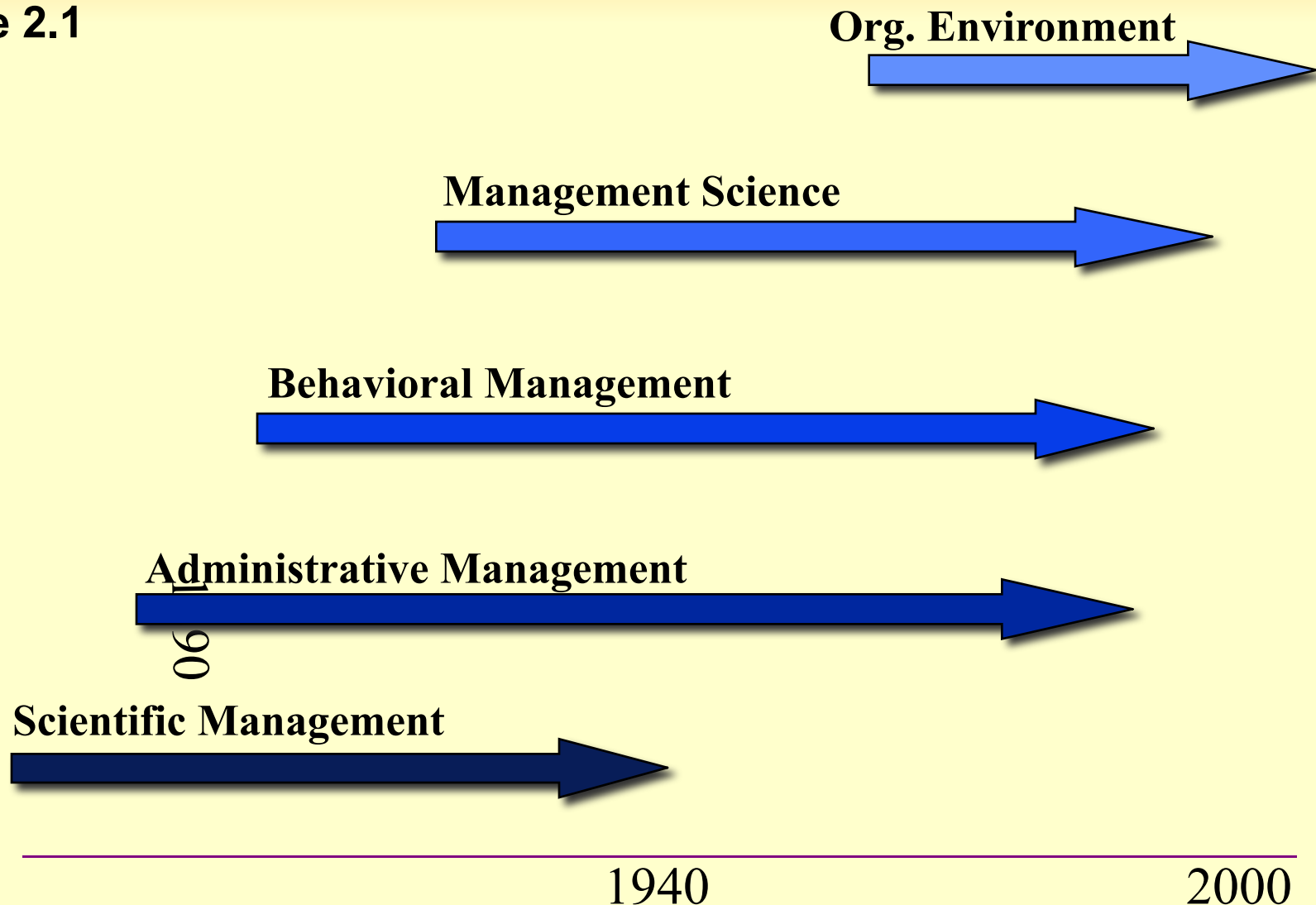
- **Modern management began in the late 19th century.**
 - Organizations were seeking ways to better satisfy customer needs.
 - Machinery was changing the way goods were produced.
 - Managers had to increase the efficiency of the worker-task mix.

Job specialization

- **Adam Smith, 18th century economist, found firms manufactured pins in two ways:**
 - **Craft** -- each worker did all steps.
 - **Factory** -- each worker specialized in one step.
- **Smith found that the factory method had much higher productivity.**
 - Each worker became very skilled at one, specific task.
- **Breaking down the total job allowed for the division of labor.**

Evolution of Management Theory

Figure 2.1



Scientific Management

- **Defined by Frederick Taylor, late 1800's.**
- **The systematic study of the relationships between people and tasks to redesign the work for higher efficiency.**
 - Taylor sought to reduce the time a worker spent on each task by optimizing the way the task was done.

The 4 Principles

- **Four Principles to increase efficiency:**
 1. *Study the way the job is performed* now & determine new ways to do it.
 - ◆ Gather detailed, time and motion information.
 - ◆ Try different methods to see which is best.
 2. *Codify the new method into rules.*
 - ◆ Teach to all workers.
 3. *Select workers whose skills match* the rules set in Step 2.
 4. *Establish a fair level of performance* and pay for higher performance.
 - ◆ Workers should benefit from higher output.

Problems of Scientific Management

- **Managers often implemented only the increased output side of Taylor's plan.**
 - They did not allow workers to share in increased output.
 - Specialized jobs became very boring, dull.
 - Workers ended up distrusting Scientific Management.
- **Workers could purposely “under-perform”**
- **Management responded with increased use of machines.**

The Gilbreths

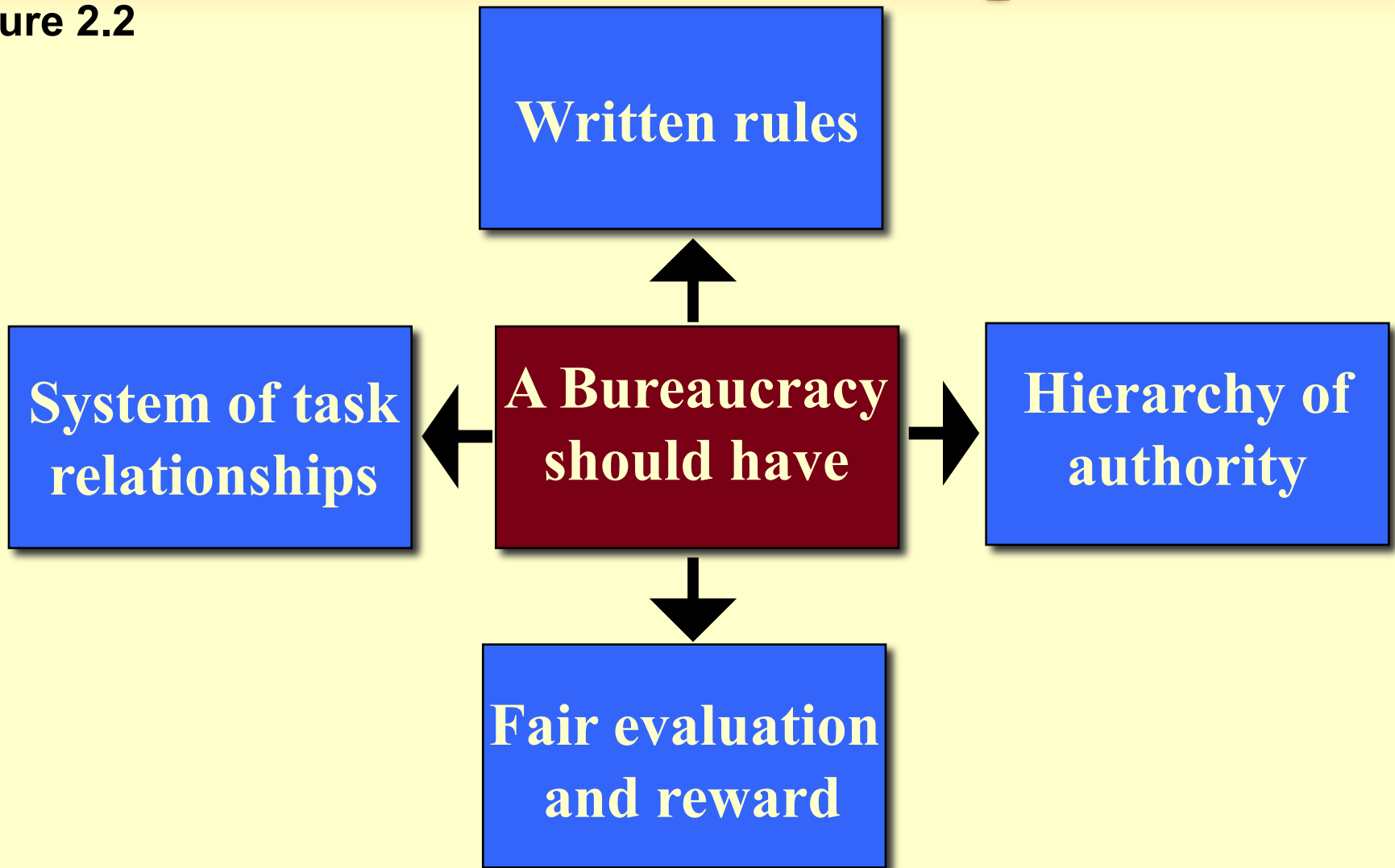
- Frank and Lillian Gilbreth refined Taylor's methods.
 - Made many improvements to time and motion studies.
- Time and motion studies:
 - 1. ***Break down each action*** into components.
 - 2. ***Find better ways*** to perform it.
 - 3. ***Reorganize each action*** to be more efficient.
- Gilbreths also studied fatigue problems, lighting, heating and other worker issues.

Administrative Management

- **Seeks to create an organization that leads to both efficiency and effectiveness.**
- **Max Weber developed the concept of bureaucracy.**
 - A formal system of organization and administration to ensure effectiveness and efficiency.
 - Weber developed the Five principles shown in Figure 2.2.

Bureaucratic Principles

Figure 2.2



Key points of Bureaucracy

Authority is the power to hold people accountable for their actions.

Positions in the firm should be held based on ***performance*** not social contacts.

Position duties are clearly identified. People should know what is expected of them.

Lines of authority should be clearly identified. Workers know who reports to who.

Rules, Standard Operating Procedures (SOPs), & Norms used to determine how the firm operates.

- ◆ Sometimes, these lead to “red-tape” and other problems.

Fayol's Principles

- **Henri Fayol, developed a set of 14 principles:**
 1. ***Division of Labor:*** allows for job specialization.
 - ◆ Fayol noted firms can have too much specialization leading to poor quality and worker involvement.
 2. ***Authority and Responsibility:*** Fayol included both formal and informal authority resulting from special expertise.
 3. ***Unity of Command:*** Employees should have only one boss.
 4. ***Line of Authority:*** a clear chain from top to bottom of the firm.
 5. ***Centralization:*** the degree to which authority rests at the very top.

Fayol's Principles

6. ***Unity of Direction:*** One plan of action to guide the organization.
7. ***Equity:*** Treat all employees fairly in justice and respect.
8. ***Order:*** Each employee is put where they have the most value.
9. ***Initiative:*** Encourage innovation.
10. ***Discipline:*** obedient, applied, respectful employees needed.

Fayol's Principles

11. ***Remuneration of Personnel:*** The payment system contributes to success.
12. ***Stability of Tenure:*** Long-term employment is important.
13. ***General interest over individual interest:*** The organization takes precedence over the individual.
14. ***Esprit de corps:*** Share enthusiasm or devotion to the organization.

Behavioral Management

- **Focuses on the way a manager should personally manage to motivate employees.**
- **Mary Parker Follett: an influential leader in early managerial theory.**
 - Suggested workers help in analyzing their jobs for improvements.
 - The **worker** knows the best way to improve the job.
 - If workers have the knowledge of the task, then they should control the task.

The Hawthorne Studies

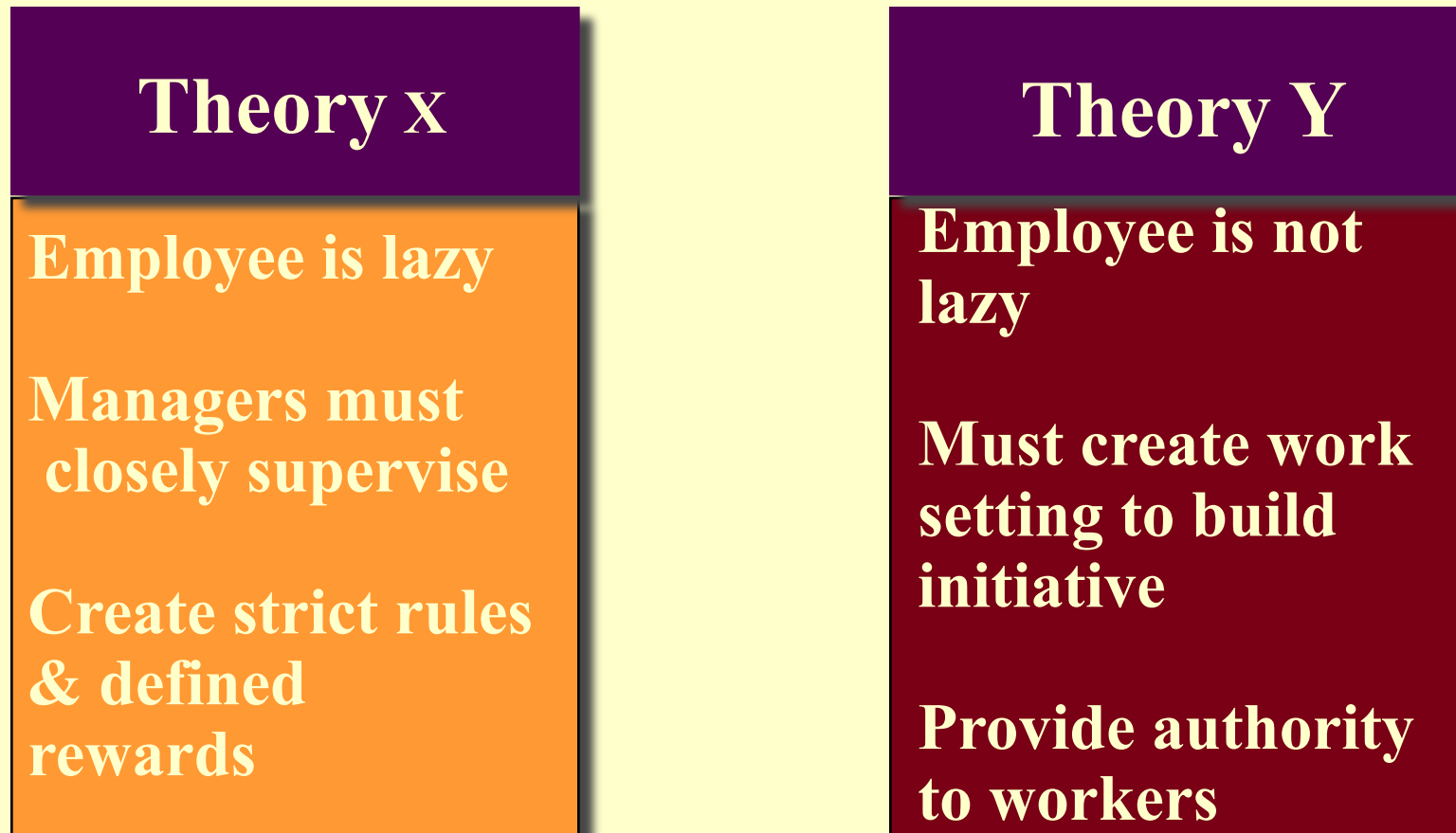
- **Study of worker efficiency at the Hawthorne Works of the Western Electric Co. during 1924-1932.**
 - Worker **productivity was measured** at various levels of light illumination.
 - Researchers found that regardless of whether the light levels were raised or lowered, productivity rose.
- **Actually, it appears that the workers enjoyed the attention they received as part of the study and were more productive.**

Theory X and Y

- **Douglas McGregor proposed the two different sets of worker assumptions.**
 - g **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.
 - g **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 the worker great latitude, and create an organization to stimulate the worker.

Theory X v. Theory Y

Figure 2.3



Theory Z

- **William Ouchi researched the cultural differences between Japan and USA.**
 - USA culture emphasizes the individual, and managers tend to feel workers follow the Theory X model.
 - Japan culture expects worker committed to the organization first and thus behave differently than USA workers.
- **Theory Z combines parts of both the USA and Japan structure.**
 - Managers stress long-term employment, work-group, and organizational focus.

Management Science

- **Uses rigorous quantitative techniques to maximize resources.**

Quantitative management: utilizes linear programming, modeling, simulation systems.

Operations management: techniques to analyze all aspects of the production system.

Total Quality Management (TQM): focuses on improved quality.

Management Information Systems (MIS): provides information about the organization.

Organization-Environment Theory

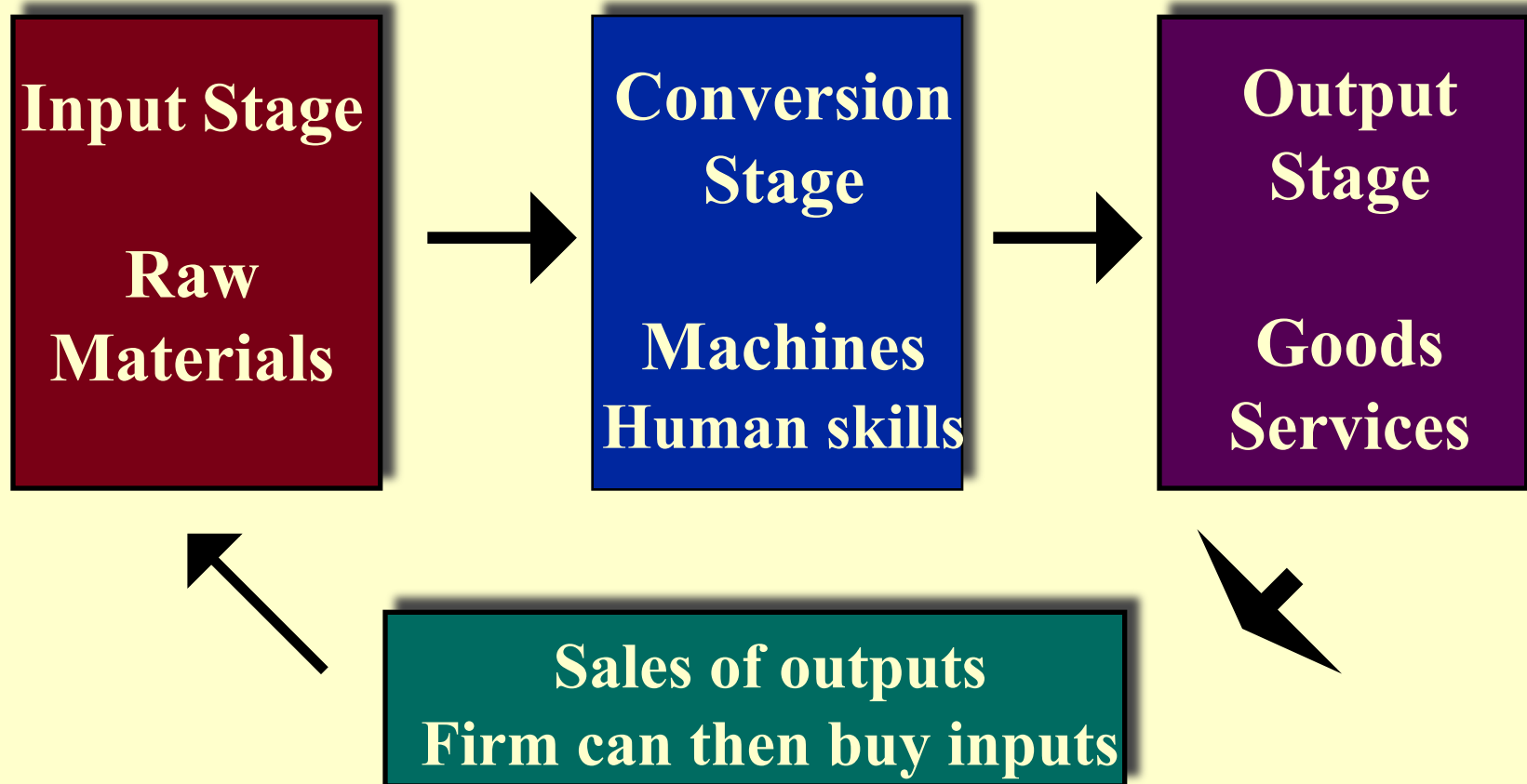
- **Considers relationships inside and outside the organization.**
 - The environment consists of forces, conditions, and influences outside the organization.
- **Systems theory considers the impact of stages:**
 - Input:*** acquire external resources.
 - Conversion:*** inputs are processed into goods and services.
 - Output:*** finished goods are released into the environment.

Systems Considerations

- **An open system interacts with the environment. A closed system is self-contained.**
 - Closed systems often undergo entropy and lose the ability to control itself, and fails.
- ***Synergy*: performance gains of the whole surpass the components.**
 - Synergy is only possible in a coordinated system.

The Organization as an Open System

Figure 2.4



Contingency Theory

- **Assumes there is no one best way to manage.**
 - The environment impacts the organization and managers must be flexible to react to environmental changes.
 - The way the organization is designed, control systems selected, depend on the environment.
- **Technological environments change rapidly, so must managers.**

Structures

- ***Mechanistic:* Authority is centralized at the top. (Theory X)**
 - Employees closely monitored and managed.
 - Very efficient in a stable environment.
- ***Organic:* Authority is decentralized throughout employees. (Theory Y)**
 - Much looser control than mechanistic.
 - Managers can react quickly to changing environment.