## The History of Management

By: Ranu Nagori

## The Evolution of Management

## After reading the next four sections, you should be able to:

- 1. explain the history of scientific management.
- 2. discuss the history of bureaucratic and administrative management.
- 3. explain the history of human relations management.
- 4. discuss the history of operations, information systems, and contingency management. Ranu Nago

#### Management Ideas and Practice Throughout History

5000 BC	Sumerians	Record keeping
4000-2000 BC	Egyptians	Plan, organize, control. Written requests.
1800 BC	Hammurabi	Controls and written documentation
600 BC	Nebuchadnezza	Wage incentives, production control
500 BC	Sun Tzu	Strategy
400 BC	Xenophon	Management as a separate art
400 BC	Cyrus	Human relations and motion study
175	Cato	Job descriptions
284	Diocletian	Delegation of authority
900	Alfarabi	Listed leadership traits
1100	Ghazali	Listed managerial traits
1418	Barbarigo	Different organizational forms/structures
1436	Venetians	Numbering, standardization, interchangeability
1500	Sir Thomas More	Critical of poor management and leadership
1525	Machiavelli	Cohesiveness, power, and leadership

#### Why We Need Managers Today



#### The Evolution of Management Theory

Organizational Environment Theory

Management Science Theory

Behavioral Management Theory



# The History of Scientific Management



#### **Scientific Management**

 Studies and tests methods to identify the best, most efficient ways

- No standardization of procedures
- No follow-up on improvements

# 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.
  - 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

## Frederick W. Taylor



Frederick Taylor is known today as the "father of scientific management." One of his many contributions to modern management is the common practice of giving employees rest breaks throughout the day.

Frederick W. Taylor, 1856-1915

## Taylor's Four Management Principles

Develop a science for each element of a man's work, which replaces the old rule-of-thumb method.

Scientifically select and then train, teach, and develop the workman.

Cooperate with the men to insure all work is done in accordance with the principles of the science.

There is almost equal division of the work and the responsibility between management and workmen.

# F.W. Taylor and Scientific Management

- Scientific Management
  - The systematic study of the relationships between people and tasks for the purpose of redesigning the work process for higher efficiency.
    - Defined by Frederick Taylor in the late 1800s to replace informal rule of thumb knowledge.
    - Taylor sought to reduce the time a worker spent on each task by optimizing the way the task was done.

#### Frank & Lillian Gilbreth

Frank and Lillian Gilbreth were prolific researchers. Their work is the subject of *Cheaper by the Dozen,* written by their son and daughter.





## Frank and Lillian Gilbreth

- Refined Taylor's work and made many improvements to the methodologies of time and motion studies.
  - Time and motion studies
    - Breaking up each job action into its components.
    - Finding better ways to perform the action.
    - Reorganizing each job action to be more efficient.
- Also studied worker-related fatigue problems caused by lighting, heating and the design of tools and machines.

#### Motion Studies: Frank & Lillian Gilbreth

**Time Study** 

Timing how long it takes good workers to complete each part of their jobs.

**Motion Study** 

Breaking each task into its separate motions and then eliminating those that are unnecessary or repetitive.

## Charts: Henry Gantt

Current Week									
Weeks	23 Sep to 30 Sep	30 Sep to 7 Oct	7 Oct to 14 Oct	14 Oct to 21 Oct	21 Oct to 28 Oct	28 Oct to 4 Nov	4 Nov to 11 Nov	11 Nov to 18 Nov	18 Nov to 25 Nov
Tasks									
Interview and select architectural firm	Architect by (	October 7							
Hold weekly planning meetings with architects			Weekly p Novembe		ith architec				
Obtain permits and approval from city	Adminis	trative	Mana	geme	nt <sup>v</sup> orme	k approval <b>Dŕý</b>			
Begin preparing site for construction				•		onstruction mber 18			
Finalize loans and financing							inancing fin November 1		
Begin construction									Start building
Tasks									
Weeks	23 Sep to 30 Sep	30 Sep to 7 Oct	7 Oct to 14 Oct	14 Oct to 21 Oct	21 Oct to 28 Oct	28 Oct to 4 Nov	4 Nov to 11 Nov	11 Nov to 18 Nov	18 Nov to 25 Nov
Current Week									

#### HENRY L.GANTT(1861-1919)

- Well known for Task and bonus system -The Gantt chart
- If the worker completed the work fast, i.e., in less than the standard time, he received a bonus.
- It is a simple chart that compares actual and planned performances.

## Administrative Management Theory

- Administrative Management
  - The study of how to create an organizational structure that leads to high efficiency and effectiveness.
- It focused on principles that could be used by managers to coordinate the internal activities of organizations.
- Henri Fayol (1841-1925)

#### Administrative Management: Henri Fayol

- 1. Division of work
- 2. Authority and responsibility
- 3. Discipline
- 4. Unity of command
- 5. Unity of direction
- 6. Subordination of individual interests
- 7. Remuneration

- 8. Centralization
- 9. Scalar chain

10. Order

**11. Equity** 

12. Stability of tenure of personnel

13. Initiative

14. Esprit de corps

## Fayol's Principles of Management

- Division of Labor: allows for job specialization.
  - Fayol noted jobs can have too much specialization leading to poor quality and worker dissatisfaction.
- Authority and Responsibility
  - Fayol included both formal and informal authority resulting from special expertise.
- Unity of Command
  - Employees should have only one boss. agor

- Line of Authority
  - A clear chain of command from top to bottom of the firm.
- Centralization
  - The degree to which authority rests at the top of the organization.
- Unity of Direction
  - A single plan of action to guide the organization.

- Equity
  - The provision of justice and the fair and impartial treatment of all employees.
- Order
  - The arrangement of employees where they will be of the most value to the organization and to provide career opportunities.
- Initiative
  - The fostering of creativity and innovation by encouraging employees to act on their own.

- Discipline
  - Obedient, applied, respectful employees are necessary for the organization to function.
- Remuneration of Personnel
  - An equitable uniform payment system that motivates and contributes to organizational success.
- Stability of Tenure of Personnel
  - Long-term employment is important for the development of skills that improve the organization's performance.

- Subordination of Individual Interest to the Common Interest
  - The interest of the organization takes precedence over that of the individual employee.
- Esprit de corps
  - Comradeship, shared enthusiasm foster devotion to the common cause (organization).

## The History of Bureaucratic Management

Max Weber, 1864-1920



Bureaucracy

The exercise of control on the basis of knowledge, expertise, or experience.

#### **Bureaucratic Management**

#### Weber (1864-1920)

Characteristics of Weber's ideal Bureaucracy:

- Work specification and division of labor
- Abstract rules and regulations
- Impersonality of managers
- Hierarchy of organization structure

## The Aim of Bureaucracy

- 1. Qualification-based hiring
- 2. Merit-based promotion
- 3. Chain of command
- 4. Division of labor
- 5. Impartial application of rules and procedures
- 6. Recorded in writing
- 7. Managers separate from owners

## Weber's Five Principles 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 so that people know what is expected of them.
- Lines of authority should be clearly identified such that workers know who reports to whom.
- Rules, Standard Operating Procedures (SOPs), and norms guide the firm's operations.

#### **Behavioral Approach**

The behavioral approach to management emphasized individual attitudes and behaviors and group processes, and recognized the significance of behavioral process in the workplace.

#### The History of Human Relations Management

Efficiency alone is not enough to produce organizational success.

Success also depends on treating workers well.



## HAWTHORNE STUDIES

- Illumination studies
- Relay assembly test room study
- Interview Phase experiments
- Bank wiring room study

#### Contributions of Behavioral Thinkers to Management Thought

Name	Period	Contribution
Mary Parker Follet	1868- 1933	Advocated the concept of 'power sharing' and integration (focuses on group influences)
Elton Mayo	1868- 1933	foundation for the Human Relations Movement;
Abraham Maslow	1908 – 1970	Relates human motivation to hierarchy of needs
Douglas McGregor	1906- 1964	Emphasizes human characteristics (Theory X and Theory Y personalities)
Chris Argyris	1964	Classified organizations based on the employees' set of values

#### **Abraham Maslow**

His theory rested on these assumptions.

- Physiological needs;
- Safety or security needs
- Belongingness or social needs;
- Esteem or status needs
- Self actualization or self-fulfillment needs.

## Maslow's Need Hierarchy



#### **Douglas Mcgregor**

Theory X	Theory Y
Most People dislike work	Work is a natural activity like play.
Most People must be coerced and threatened before they work.	People are capable of self direction and self control
Most people prefer to be directed. They avoid responsibility and have little ambition.	People become committed to organizational objectives if they are rewarded in doing so.

## **Management Science**

- It stresses the use of mathematical models and statistical methods for decision-making.
- Another name is the Operations Research.

#### Operations, Information, Systems, and Contingency Management



## **Quantitative Approach**

- It includes the application of statistics, optimization models, information models and computer simulations. More specifically, this approach focuses on achieving organizational effectiveness.
- □ Three main branches:
  - Management Science
  - Operations Management and
  - Management Information Systems.

#### **Operations Management**

deals with the effective lt management of the production process and the timely delivery of an organization's products and services.

#### Management Information Systems

Management information systems focuses on designing and implementing computer-based information systems for business organizations.

#### Modern Approaches to Management

- Systems Theory
- Contingency Theory

### **Systems Theory**



Feedback

## The Open-Systems View

- Open System
  - A system that takes resources for its external environment and converts them into goods and services that are then sent back to that environment for purchase by customers.
  - Inputs: the acquisition of external resources.
  - Conversion: the processing of inputs into goods and services.
  - Output: the release of finished goods into the environment.

## **Other System Considerations**

- Closed system
  - A system that is self-contained and thus not affected by changes occurring in its external environment.
  - Often undergoes entropy and loses its ability to control itself, and fails.
- Synergy
  - Performance that results when individuals and departments coordinate their actions
    - Performance gains of the whole surpass the sum of the performance of the individual components.

#### **Contingency Theory**



#### Contingency Viewpoint

Managers' use of other view points to solve problems

•External environment

Technology

Individuals

## **Contingency Management**

**Contingency Approach** 

Holds that the most effective management theory or idea depends on the kinds of problems or situations that managers are facing at a particular time and place.

## Organizational Environment Theory

- Organizational Environment
  - The set of forces and conditions that operate beyond an organization's boundaries but affect a manager's ability to acquire and utilize resources.