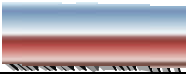


# Chapter 2

## Historical development of management



### Objectives

#### **The students should be able to:**

- Explain the historical development of management
- Identify several important pre-classical contributions to the field of management
- Summarize scholar's contributions within the scientific viewpoint of management
- Describe major developments contributing to the establishment of the behavioral viewpoint



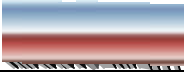
## Objectives

- Summarize the approaches within the quantitative management viewpoint
- Explain how current knowledge about management is the result of innovative processes involving many management pioneers



## History of science of management

- Building Pyramids of Egypt in very long time with the participation of hundreds of employees.
  - Who is a person telling with employees what they have to do?
  - Who is a person ensuring that it is enough stones for employees working continuously in the construction field?
    - Manager
      - Their works are -
        - » Planning of what need to be done.
        - » Organizing the human resources and materials to carry out the plans (activities)
        - » Leading and guiding employees to complete their tasks
        - » Organizing the controls to ensure all tasks, activities are completed as planned



## History of science of management...

- Enterprise and Company form firstly appears in Venice, Italy in the 15<sup>th</sup> Century.
  - Building and assembling process of warships through canal
  - System of materials stores, management of labor force, and accounting system that records the revenue and costs
- Organization and management has been born a thousand of years ago.



## History of science of management....

Important milestones before the 20<sup>th</sup> Century

– *Wealth of Nations* - Adam Smith, 1776

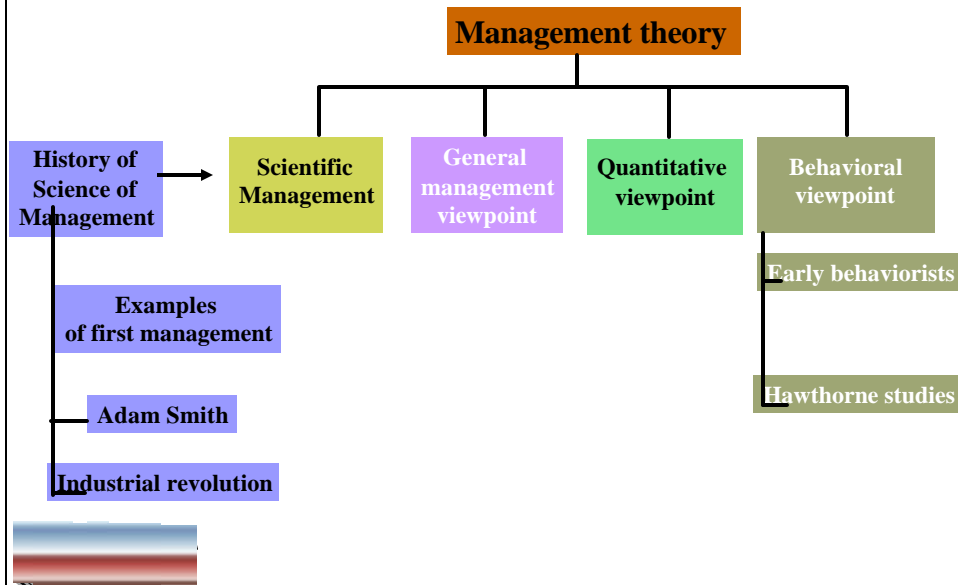
- *Division of labor* (work specialization)– the degree to which work necessary to achieve organizational goals is divided into various jobs

- 10 brads/person/day vs. 48.000 brads/10persons/day

– *Industrial revolution* (the 18<sup>th</sup> Century in England)

- Replacing handicraft works by equipments, machines, factories appeared and grown
- The bigger organizations required official management (demand forecasting, ensuring the materials availability, division of labor, etc.)

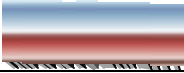
## Major viewpoints in the development of modern management



## Scientific Management

### F.W. Taylor (1856-1915) – Principles of scientific management

- Scientifically study each part of a task and develop the best method for performing it
- Based on the viewpoint of improving effectiveness and efficiency of handcraft work
- Apply scientific methods on jobs carrying out in production plans
- Increase the productivity of iron shovel man through:
  - Assigning right people
  - Providing right tools
  - Providing specific instructions
  - Paying money incentives



### Table 2.1: TAYLOR's four principles of scientific management

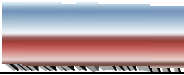
1. Developing scientific rules of working for each part of a task, avoiding naturally performing
2. Carefully select workers and train them to perform a task using the scientifically developed method (in the past, the workers choose the jobs by themselves and self-coach)
3. Cooperate fully with workers to ensure they use the proper method
4. Divide fairly work and responsibility between managers and workers. Managers are responsible for works that are more suitable with their capabilities



## Scientific Management...

### Frank and Lillian Gilbreth

- Using moving figures to study the motions of arm and body
- Eliminate unnecessary motions
- *Micro-chronometer*
- *therbligs* – isolation of 17 basic motions (select, position – hold-motions)
- For example: reduced bricklaying motions from 18.5 to 4. Using Frank's approach, workers increased bricks laid per day from 1000 to 2700 without increasing physical effort.





















## Task analysis (Therbligs)

### Taking a pencil

- |                          |   |                    |
|--------------------------|---|--------------------|
| 1. V?i tay d?n bút chì   | ) | (Transport Empty)  |
| 2. N?m bút chì           | ∪ | (Grasp)            |
| 3. Nh?c bút chì lên      | † | (Disassemble)      |
| 4. Kéo bút chì v?        | ⤵ | (Transport Loaded) |
| 5. Đ?t bút chì vào v?trí | † | (Assemble)         |
| 6. Th? tay               | ⤴ | (Release Load)     |
| 7. Đưa tay vào v?trí cũ  | ) | (Transport Empty)  |



## Therbligs Signs

Sign	Action	Sign	Action
	Look for		Control
	Find		Wait (unavoidable)
	Select		Knock off
	grasp, hold, pick		Move solely
	Move in a row		hold (implemented)
	Change direction		Take a rest
	Install		Prepare
	Use		Wait (avoidable)
	unleash		Think

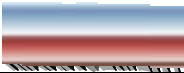
## Theorists of general management

### Henri Fayol (1841-1925)

- Focus on works to help organizations becoming more efficient
- Focus on all activities of managers
- Develop theory to help management to be more efficient
  - Propose a common set of functions of management
  - Publish a “Principles of management” text book
    - Basic principles of management and it is easily to disseminate to other audients

## Table 2.2: 14 FAYOL's Principles of management

1. *Division of work.* Work specialization can result in efficiencies and is applicable to both managerial and technical functions.
2. *Authority.* Authority is the right to give orders and the power to exact obedience. With authorities comes responsibility.
3. *Discipline.* Discipline is absolutely necessary for the smooth running of an organization. Workers must obey and respect organizational rules.
4. *Unity of command.* An employee should receive orders from one superior only.
5. *Unity of direction.* Activities aimed at the same objective should be organized so there is one plan and one person in charge.
6. *Subordination of individual interest to general interest.* The interests of one employee or group should not prevail over the organization's interests and goals.
7. *Remuneration.* Compensation should be fair to both employee and employer.



## Table 2.2: 14 FAYOL's Principles of management

8. *Centralization.* This termination implies the level of subordinate's participation on decision making.
9. *Scalar chain.* Hierarchical chain of authority extends from top to bottom of an organization and defines the communication path.
10. *Order.* Right person and materials should be in the right place.
11. *Equity.* Employees should be treated with kindness and justice
12. *Stability of personnel tenure.* Because time is required to become effective in new jobs, high turnover should be prevented.
13. *Initiative.* Managers should encourage and develop subordinate initiative to the fullest.
14. *Collaborative (Esprit de corps).* Encouraging team esprit will create the harmony and unity in organizations.





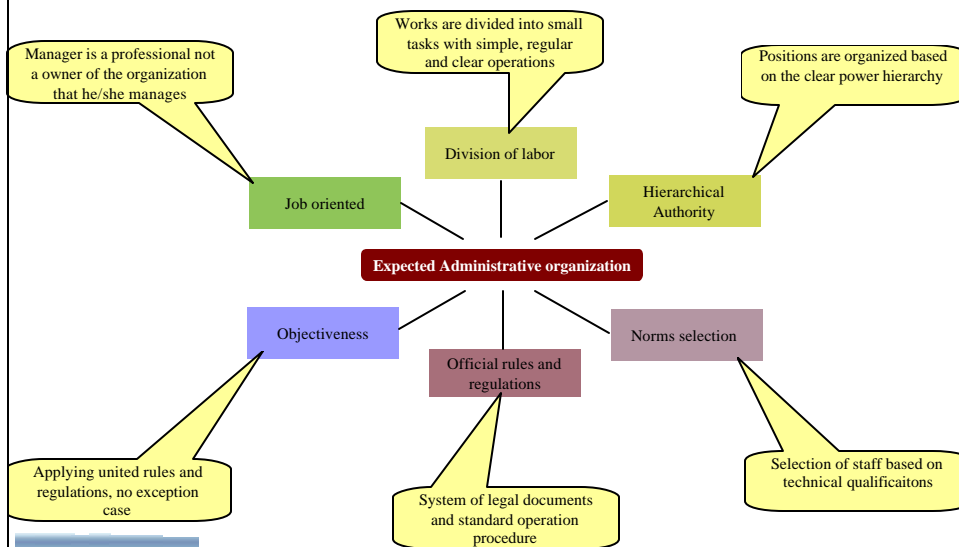
# Theorists of general management

## Max Weber

- Develop the theory on power structure and describe an organization based on power relationships
- **Administration** – is an ideal organization
  - Division of labor
  - Hierarchical system is clearly identified
  - Detail rules and norms
  - Objective relationships (without feeling interfere)



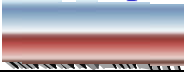
Figure 2.2: WEBER's Ideal Behavioral Organization



## Quantitative Management perspective

### Operation process (Scientific Management)

- Focused on mathematics, statistics and information aids to support managerial decision making and organizational effectiveness.
  - Applying statistics
  - Optimal models
  - Computer stimulation of management
- *Linear planning* – improving quality of resources allocation
- *Scheduling on critical-path (critical-path)* – improving work scheduling



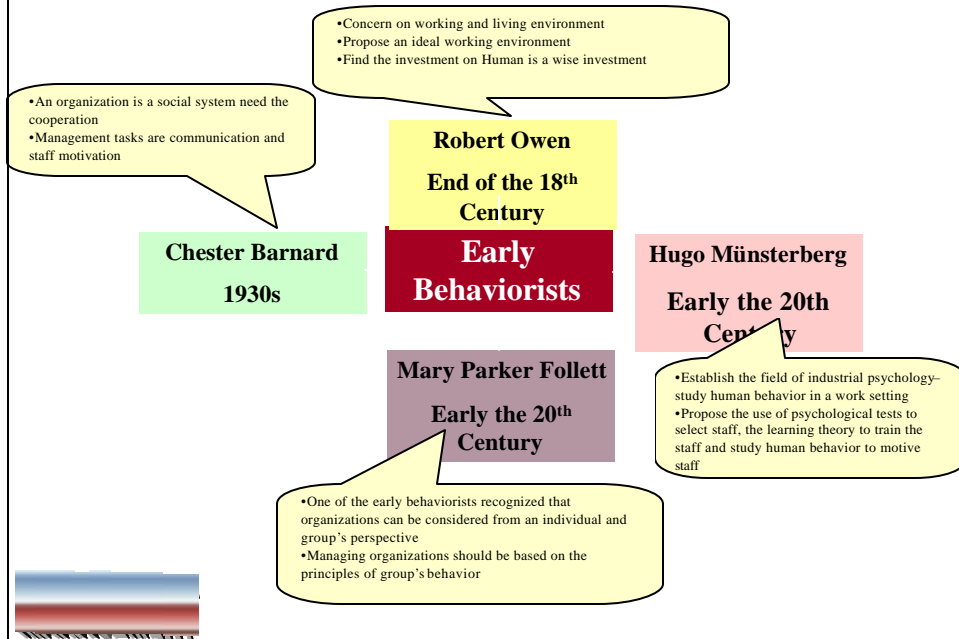
## Behavioral viewpoint

### Behavioral viewpoint

- Understand the various factors effecting human behavior in organizations
- Early behaviorists:
  - Born at the end of the 1800s – early of the 1900s
  - Believe that Human (People) is the most important asset of the organization
  - Create basic ideas for different human resource management
    - Staff selection
    - Staff motivation



**Figure 2.3: Early Behaviorists**



## **Behavioral viewpoint (....)**

### **Hawthorne studies (cont.)**

- 1<sup>st</sup> set of studies: started in 1924 at Western Electric Company
  - Study the impact of illumination on worker's productivity
  - Do comparisons between: control group (working in separate area) and experimental groups (working in lighting level adjustable)
  - The productivity of both groups increased when level of lighting increase, however the productivity of these both groups have not been reduced when the level of lighting is reduced until equal to the lunar lighting
  - Conclude that the level of lighting has no influence on productivity

## Behavioral viewpoint ...

Hawthorne studies (cont.)

– *Second set of studies*

- Studied on work design, changing the length of working day and working week, relax period, individual and group incentive pay.
- Concluded that supervisor arrangement were the major reason for productivities increases and physical changes (relax period, free lunches, shorter hours, group incentive pay) were less important factors to productivity.

– *Third set of studies*

- Built on 2nd set's findings
- Social regulations and group norm are major factors influence on the individual working behavior

– **The Hawthorne Studies showed the impact a job's social aspects have on productivity, particularly the effects of the personal attention of supervisors and group-member relationships -**



## Review Questions

1. Explain why the division of labor and industrial revolution are important to the management studies?
2. How many approaches to management study? List the name of each approach
3. Describe the contributions of Taylor's to scientific management.
4. Explain the contributions of Frank and Lillian Gilberth to scientific management
5. Describe 14 management principles of Fayol and compare these principles to Taylor's management principles.
6. What are the contributions of Weber to general management?
7. Explain the contributions of Quantitative management to scientific management.
8. What is OB?
9. Describe some contributions of early behaviorists
10. Describe the Hawthorne's studies and these contributions to practical management.

