

# **Development of Management Thought by Management Guru**

17:38



## **Taylor and Scientific Management**

---

- Frederick Winslow Taylor and other contributors notably Frank Gilbreth, Lillian Gilbreth, and Henry Gantt, investigated the effective use of human beings in industrial organizations, particularly at the shop floor levels.
  
- Taylor has defined the basic problem of managing as the art of "**Knowing exactly what you want men to do and then see in that they do it in the best and cheapest way**"

## Taylor and Scientific Management

---

- Since Taylor has put the problem of managing on a scientific way, he is often known as "**Father of Scientific Management**" and his contributions as the **principles of Scientific Management**.
- **Taylor** joined Midvale Steel company in U.S.A. as a worker and later on became supervisor. During this period, he continued his studies and completed his ME. Subsequently he joined Bethlehem Steel company. At both places he carried out some experiments, how to increase human efficiency.

## Taylor and Scientific Management

---

- Since Taylor has put the problem of managing on a scientific way, he is often known as "**Father of Scientific Management**" and his contributions as the **principles of Scientific Management**.
- **Taylor** joined Midvale Steel company in U.S.A. as a worker and later on became supervisor. During this period, he continued his studies and completed his ME. Subsequently he joined Bethlehem Steel company. At both places he carried out some experiments, how to increase human efficiency.
- Even after his retirement, he continued to develop scientific management. On the basis of his experiments many papers and book published and his all contributions compiled in a book "**Scientific Management**".

# **Taylor and Scientific Management**

---

- Taylor's work can be described in two major parts:

**1. Main Features of Scientific Management**

**2. Principles of Scientific Management**

# **Taylor and Scientific Management**

---

## **□ Main Features of Scientific Management**

### **1. Separations of Planning and Doing**

- The separation of planning aspects from actual doing of work.**
  - Before this concept, Worker used to plan about how he had to work and what instruments were necessary for that.**
  - The worker was put under supervision of a supervisor commonly known as Gang Boss.**
  - The supervisor's job was merely to see how the workers were performing. This was creating a lot of problems.**
  - Hence, he emphasized planning should be left to supervisor and the worker should emphasize only operational work.**
-

# **Taylor and Scientific Management**

---

## **□ Main Features of Scientific Management**

### **3. Job Analysis**

**□ It is undertaken to find out one best way of doing the thing.**

**□ Time Study**

**□ Motion Study**

**□ Fatigue Study**

**□ Time – Motion – Fatigue Study**

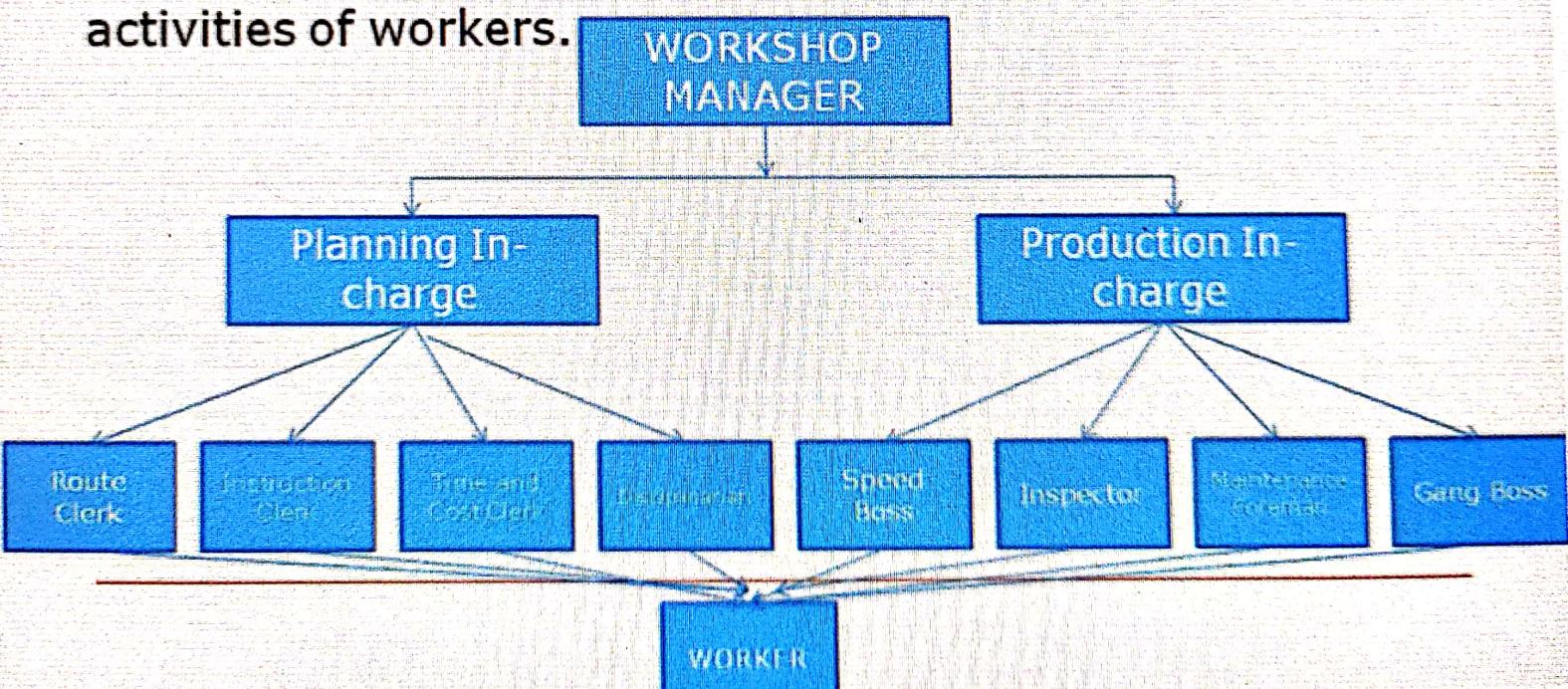
---

# Taylor and Scientific Management

## □ Main Features of Scientific Management

### 2. Functional Foremanship

- In this system eight (8) persons are involved to direct the activities of workers.



# Taylor and Scientific Management

## Main Features of Scientific Management

### **1. Separations of Planning and Doing**

- The separation of planning aspects from actual doing of work.
- Before this concept, Worker used to plan about how he had to work and what instruments were necessary for that.
- The worker was put under supervision of a supervisor commonly known as Gang Boss.
- The supervisor's job was merely to see how the workers were performing. This was creating a lot of problems.
- ...

Press Esc to exit full screen

# Taylor and Scientific Management

- Main Features of Scientific Management
- 5. Scientific Selection and Training of Worker
  
- Workers education
- Work Experience

# **Taylor and Scientific Management**

---

## **□ Main Features of Scientific Management**

### **5. Scientific Selection and Training of Worker**

- Workers education**
  - Work Experience**
  - Aptitude Test**
  - Physical Strength**
  - Technical Skill and Knowledge**
  
  - Apart from selection, proper emphasis should be given on the training of workers which makes them more efficient and effective.**
- 



# Taylor and Scientific Management

- Main Features of Scientific Management
- 6. Financial Incentive
- Differential Piece Rate System
- Taylor has suggested that wages should be based on individual performance and not on the position which he occupies.

Your microphone is muted.

# **Taylor and Scientific Management**

---

## **□ Main Features of Scientific Management**

### **4. Standardization**

#### **□ Instruments and tools**

#### **□ Period of works**

# **Taylor and Scientific Management**

---

## **□ Main Features of Scientific Management**

### **6. Financial Incentive**



#### **□ Differential Piece Rate System**

**□ Taylor has suggested that wages should be based on individual performance and not on the position which he occupies.**

# **Taylor and Scientific Management**

## **□ Principles of Scientific Management**

### **1. Replacing Rule of Thumb with Science**

- Organized knowledge should be applied which replace rule of thumb.
- Scientific method denotes precisions in determining any aspects of work, rule of thumb emphasis on estimation.
- Various aspects of work like –
  - Differential piece rate system
  - Day's fair work
  - Amount of work, etc
- These should not be based on estimation

33:45



...



# **Taylor and Scientific Management**

---

- Principles of Scientific Management**
- 2. Harmony in Group Action**
  
- Harmony in group action rather than discord (Conflict)
- Mutual give and take situation and proper understanding

# **Taylor and Scientific Management**

---

## **□ Principles of Scientific Management**

### **3. Co-operations**

- Mutual confidence, co-operations & Goodwill**
  - Co-operations between Management and Workers**
  - It can be developed through mutual understanding and a change in thinking**
  - Substitution of war for peace, healthy & brotherly co-operations, becoming friends instead of enemies.**
-

# Taylor and Scientific Management

## Principles of Scientific Management

### **4. Maximum Output**

- Continues increases in production and productivity must be focused
- It is worse crime to restrict production
- He decried quarrel over production but welcomed quarrel over distribution

## **Taylor and Scientific Management**

---

- The principles of management were more concerned with problem at the operating or shop floor levels and did not emphasize on management of the organization from manager's point of view.
- Therefore, it was more relevant from engineering point of view rather than management point of view.
- As such, the scientific management is more relevant to mechanism and automation – technical aspect of efficiency – than the broader aspects of management of an organization.

# **Taylor and Scientific Management**

---

- Principles of Scientific Management**
- 2. Harmony in Group Action**
  
- Harmony in group action rather than discord (Conflict)
- Mutual give and take situation and proper understanding