

A word cloud centered around the word "Entrepreneurship". The word "Entrepreneurship" is the largest and most prominent. Other large words include "business", "company", and "venture". Smaller words scattered around include "capital", "organization", "opportunity", "funding", "money", "finance", "wealth", "resources", "job", "creativity", "scholars", "economic", "activity", "investors", "value", "entities", "confidence", "growth", "knowledge", "creation", "projects", "innovations", "global", "workers", "concept", "cloud", "entrepreneurial", "competition", "entrepreneur", "venturing", "methods", "social", "political", "word", "financial", "careers", "passion", "skills", "corporate", "initiatives", and "global".

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Course Description

- The aim is to prepare you to assume positions in industry as **engineering managers** .
- The aim of this course is to provide students with the necessary modern managerial skills;
 - Increase productivity in organization through employee empowerment and effective communication.
 - Develop plans that will put the organization ahead of the international game.

Course Learning Outcomes

- All students will have developed **knowledge** and **understanding** of Concept of Industrial Management (Engineering point of view)

5 Functions of Management

- Planning & Forecasting
- Decision Making
- Organizing
- Leading
- Controlling
- Methods to motivate technical people

All students will have developed their **skills** in

- Forecasting
- Managing an organization
- Being able to decide the validity of received data

INDUSTRIAL REVOLUTION

Late 1700s to Late 1800s

PRIMARY SPARKS

- POWER
- MACHINERY INNOVATIONS
- TRANSPORTATION

- **INDUSTRY = WORK**
- **REVOLUTION = RAPID CHANGE**
- **From Farms to Factories**
- **From Small Shops to Large Companies**




Arise new Questions

**HOW ARE
WE GOING
TO ORGANIZE
ALL OF THIS?**

**HOW ARE
WE GOING TO
MAXIMIZE
PRODUCTIVITY?**

**HOW ARE WE
GOING TO
MANAGE ALL OF
THESE PEOPLE?**

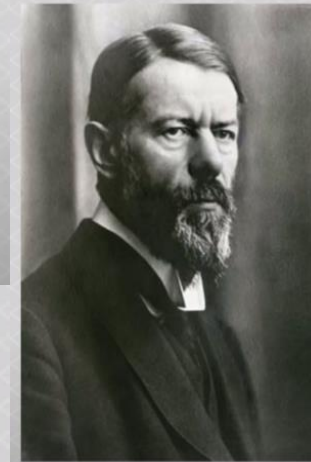
Classical Management Theory

CLASSICAL MANAGEMENT THEORY		
		
BUREAUCRACY	SCIENTIFIC MANAGEMENT	ADMINISTRATIVE SCIENCE
MAX WEBER	FREDERICK TAYLOR	HENRI FAYOL

BUREAUCRACY

- Organizations should look like the Government and the Legal System
- A "Legal-Rational" Approach
- Not Traditional, Family-Based Leadership
- Not Charisma-Based Leadership
- One's authority should be tied to the official position he or she occupies
- Clear rules should govern performance
- Standardized guidelines should determine hiring & firing
- Was against favoritism or "particularism"

Major principals of Max Weber



**PRONOUNCED
WE-BER
or VEY-BER**

SCIENTIFIC MANAGEMENT

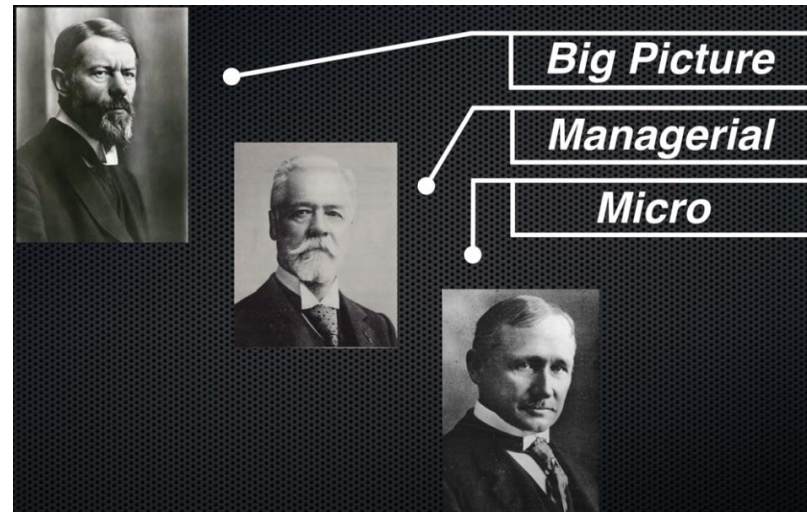
- "Applying science to work"
- Saw customized, self-styled work as a serious productivity problem
- Popularized Time and Motion Studies
- Wanted to find the "one right way" to do every single task

Major principals
of Frederick Taylor



FREDERICK
TAYLOR

Three Main Theories



- So Max Weber took a big picture, bureaucratic approach.
- Henri Fayol, took a mid-level approach. He was looking at the management side of things.
- Frederick Taylor took a micro level approach to looking at the specific tasks,
- **How shall we manage people?**
- That was the big question and he put a theory of management
- called administrative science, or just called classical management.

What is Management ?

- 1 Management is the process of achieving goals and objectives effectively and efficiently through and with the people.



- 2 "Management is a process of designing and maintaining an environment in which individuals work together in groups to effectively and efficiently accomplish selected aims".



Management Cont.....

- 3 Management is the process of achieving organizational goals and objectives effectively and efficiently by using management functions i.e.

- Planning
- Organizing
- Staffing
- Controlling



- 4 Management is a set of activities directed at an organization's resources with the aim of achieving organizational goals in an efficient and effective manner.



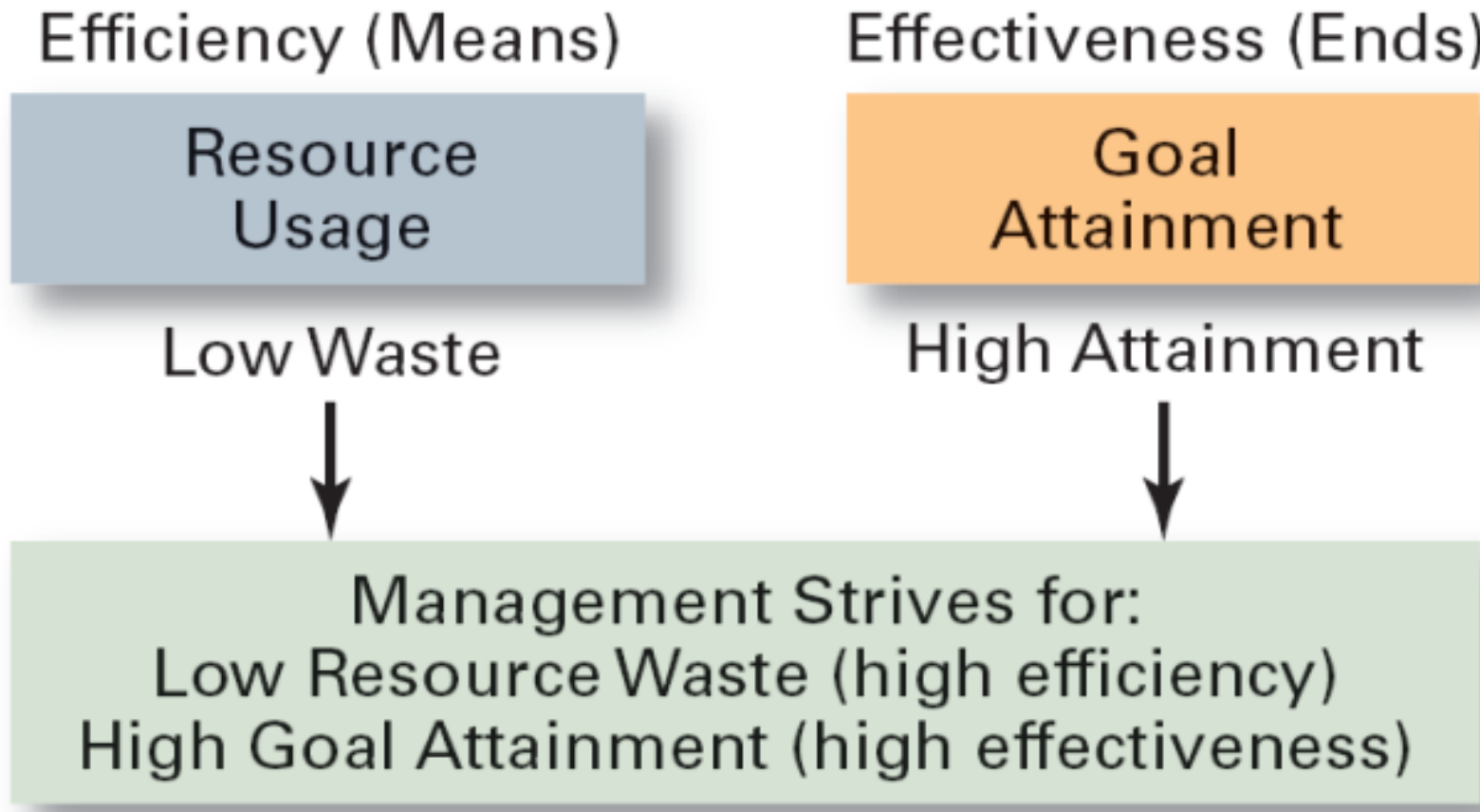
What Is Management?

- Management involves coordinating and overseeing the work activities of others so that their activities are completed efficiently and effectively.
- Managerial Concerns
 - ✓ Efficiency - “Doing things right” & Getting the most output for the least inputs
 - ✓ Effectiveness - “Doing the right things” & Attaining organizational goals



Effectiveness and Efficiency in Management

It shows that whereas efficiency is concerned with the means of getting things done. Effectiveness is concerned with the ends. Or attainment of organization goals.



Mintzberg's Managerial Roles and a Contemporary Model of Managing

- ✓ Roles are specific actions or behaviors expected of a manager.
- ✓ Mintzberg identified 10 roles grouped around interpersonal relationships, the transfer of information, and decision making.



Mintzberg's Management Roles

It shows the three management roles

- **Interpersonal Roles**
- **Informational roles and**
- **Decisional roles**

Henry Mintzberg's Managerial Roles

Category	Role	Organizational Function	Example Activities
Informational	Monitor	Responsible for information relevant to understanding the organization's internal and external environment	Handle correspondence and information such as industry, societal, and economic news and competitive information
	Disseminator	Responsible for the synthesis, integration, and forwarding of information to other members of the organization	Forward informational e-mails; share information in meetings, conference calls, webcasts, etc.
	Spokesperson	Transmit information to outsiders about organizational policy, plans, outcomes, etc.	Attend management meetings; maintain networks between the organization and stakeholders
Interpersonal	Figurehead	Symbolic leadership duties involving social and legal matters	Attend ceremonies; greet visitors; organize and attend events with clients, customers, bankers, etc.
	Leader	Motivate, inspire, and guide employees' actions; provide opportunities for training; support appropriate staffing	Build trusting relationships with employees; build effective teams; manage conflict
	Liaison	Build and maintain relationships between the organization and outside entities	Work on external boards; create and maintain social networks (real and virtual) with key stakeholders
Decisional	Entrepreneur	Scan the organizational environment for opportunities; foster creativity and innovation	Participate in strategy and review meetings for new projects or continuous improvement
	Disturbance handler	Manage organizational problems and crises	Participate in strategy and review meetings that involve problems and crises; get involved directly with key issues and people
	Resource allocator	Take responsibility for allocation of all types of organizational resources	Create work schedules; make authorization requests; participate in budgeting activities
	Negotiator	Represent the organization during any significant negotiations	Negotiate with vendors and clients; settle disputes about resource allocation

INDUSTRIAL MANAGEMENT

- Industrial management is now a branch of engineering which facilitates creation of management system and integrates same with people and their activities to utilize the resources.
- Industrial management is structured approach to manage the operational activities of the organization.

Levels of management



Managerial (Management) Level

It shows that traditionally structured organizations, managers can be classified as first-line, middle, or top



Classifying Managers

First-line Managers

- ✓ Individuals who manage the work of non-managerial employees.

Middle Managers

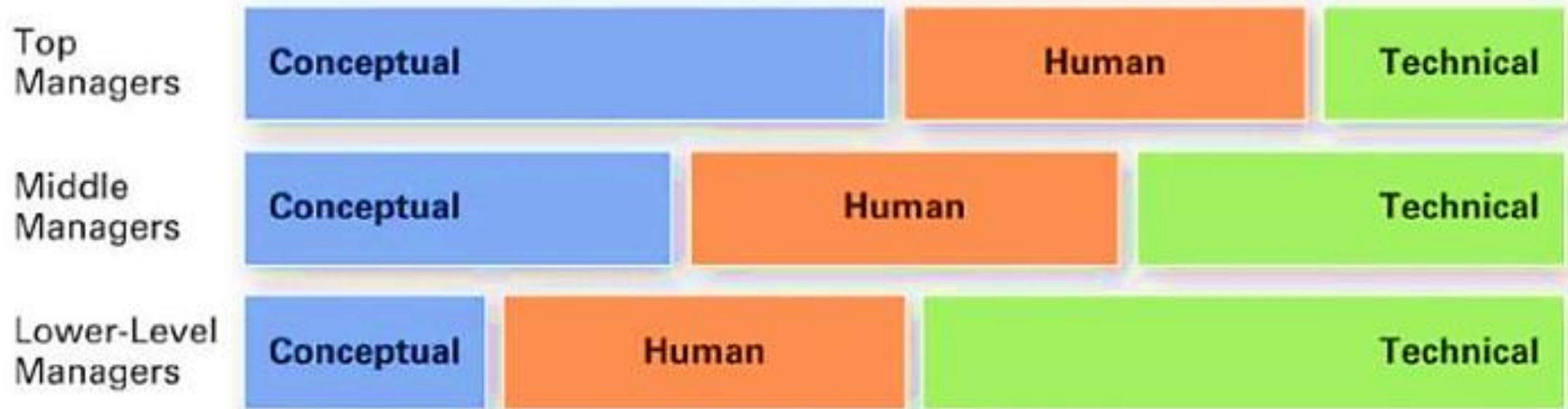
- ✓ Individuals who manage the work of first-line managers.

Top Managers

- ✓ Individuals who are responsible for making organization-wide decisions and establishing plans
- ✓ and goals that affect the entire organization.

Skills Needed at Different Managerial Levels

It shows the relationships of conceptual, human and technical skills to managerial levels.



Five Basic Functions of Management

- 1 Planning**
Planning is the process of setting goals, and charting the best way of action for achieving the goals. This function also includes, considering the various steps to be taken to encourage the necessary levels of change and innovation.
- 2 Organizing**
Organizing is the process of allocating and arranging work, authority and resources, to the members of the organization so that they can successfully execute the plans.
- 3 Staffing**
A: Staffing is the process of filling the positions in the organization and keeping them filled.
B: Staffing is the process of recruiting and selecting the right person for the right job at the right time in the right place.
- 4 Leading**
Leading involves directing, influencing and motivating employees to perform essential tasks. This function involves display of leadership qualities, different leadership styles, different influencing powers, with excellent abilities of communication and motivation.
- 5 Controlling**
Controlling is the process of devising various checks to ensure that planned performance is actually achieved. It involves ensuring that actual activities conform to the planned activities. Monitoring the financial statements, checking the cash registers to avoid overdraft etc., form part of this process.

Basic Functions of a Manager

☐ Planning

Defining goals, establishing strategies to achieve goals, developing plans to integrate and coordinate activities.

☐ Organizing

Arranging and structuring work to accomplish organizational goals.

☐ Leading

Working with and through people to accomplish goals.

☐ Controlling

Monitoring, comparing, and correcting work

Industrial Management

- To ensure maximum output with minimum cost of production.
- To ensure that activities of different individuals are coordinated to attain the common purpose in the factory.
- Goods are produced and delivered on the promised dates.
- Goods are manufactured in strict specification of customer's orders.
- Proper accounting, reporting and controlling the operations in the factory.
- To prevent wastage and losses.
- Quality products.
- Utilization of full capacity of the factory.
- Innovation

Manager

A manager is someone whose primary responsibility is to carry out the management process within an organization to achieve the organizational goals.

Changing nature of organizations and work has blurred the clear lines of distinction between managers and non-managerial employees



Managerial skills Cont'd

Conceptual skills:

- This refers to the ability to think and conceptualize abstract situations. These abilities are required for making complex decisions.

In short it is:

- The mental capacity to develop plans, strategies and vision



Human or interpersonal skills:

- This includes the ability to understand other people and interact effectively with them. The human skills are also important in creation of an environment in which people feel secure and free to express their opinions.

In short it is:

- The ability to work with other people in teams



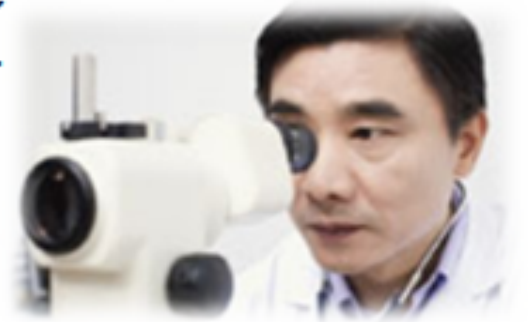
Cont....

Technical skills:

- These skills include the knowledge, abilities of and proficiency in activities involving methods, processes and procedures in the relevant fields as accounting, engineering, manufacturing etc.

Or in short:

- The ability to use the knowledge or techniques of a particular discipline to attain ends



Design skills:

- These skills enable a manager to handle and solve any kind of unforeseen or actual problems, that may crop up in the organization. Such problems could arise due to internal factors or external factors and/or both.

In short it is:

- The problem solving skill



Managerial Skills

Communication skills:

- The abilities of exchanging ideas and information effectively. To understand others and let others understand comprehensively.



Leadership skills

- The abilities to influence other people to achieve the common goal.



Where Do Managers Work?

Organization

- ✓ A deliberate arrangement of people to accomplish some specific purpose (that individuals independently could not accomplish alone).

Where Managers Important?

- ✓ Organizations need their managerial skills and abilities now more than ever
- ✓ Managers are critical to getting things done
- ✓ Managers do matter to organizations



THANK YOU

