



4

Management

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At a glance

Lesson 4 focuses on **management**. Firstly, it develops this concept as a process of **planning, organizing, leading and controlling**.

Subsequently, setting the **Organizational structure** and **Human Resource Management** (HRM) will be explained in detail, as they constitute key managerial tasks.

Lastly, we focus on the current role of the **information** in the decision-making process.

Lesson 4. Management

4.1. Management levels and functions

4.2. Organization

4.3. Human resource management

4.4 Managing information and technology

A. What is Management?

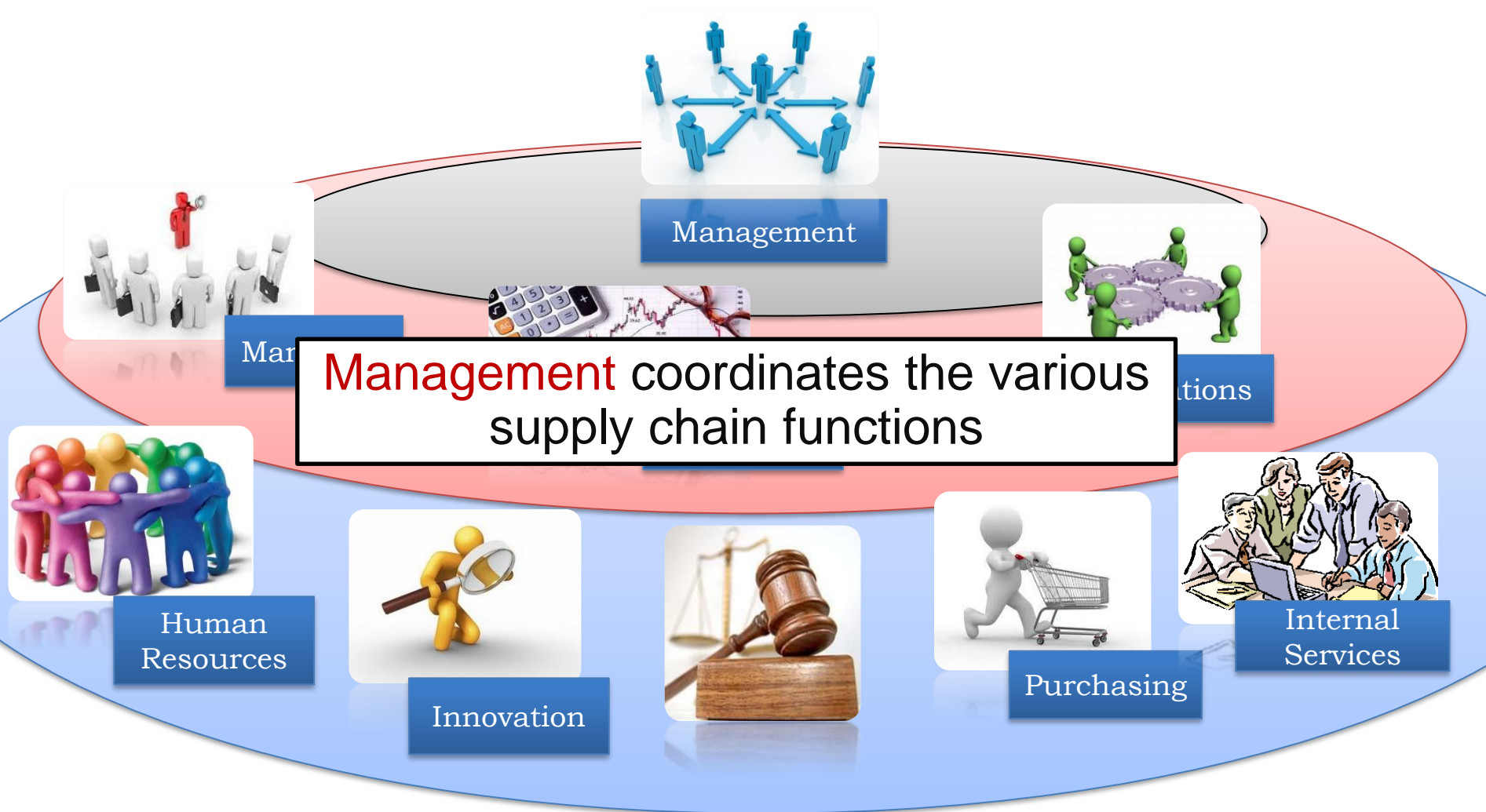
Management is “what managers do”

Management is “the art of getting things done through people”

Management is “the process of using organizational resources to achieve the organization’s goals”

Management is the business function that coordinates the efforts of people to accomplish the firm’s goals by using available resources efficiently and effectively.

A. What is Management?

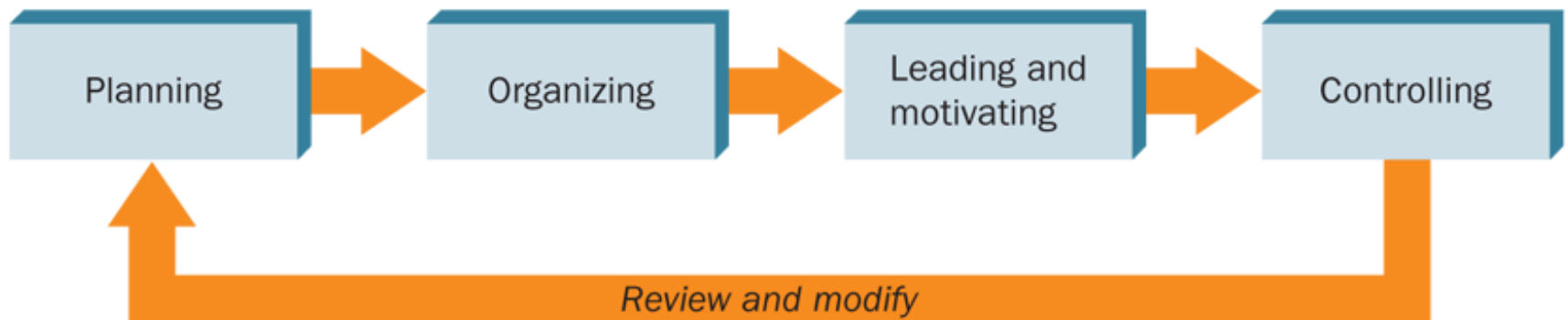


B. Managerial Functions

Management consists of achieving the goals of an organization through planning, organizing, leading, and controlling organizational resources, which includes people, money and time.

The Management Process

Note that management is not a step-by-step procedure but a process with a feedback loop that represents a flow.



B. Managerial Functions

In **controlling**, managers evaluate and regulate ongoing activities to ensure that goals are achieved.

Controlling
Monitor & measure

In **leading**, managers influence people to work toward a common goal.

Planning
Goals & resources

In **planning**, managers establish organizational goals and decide how to accomplish them

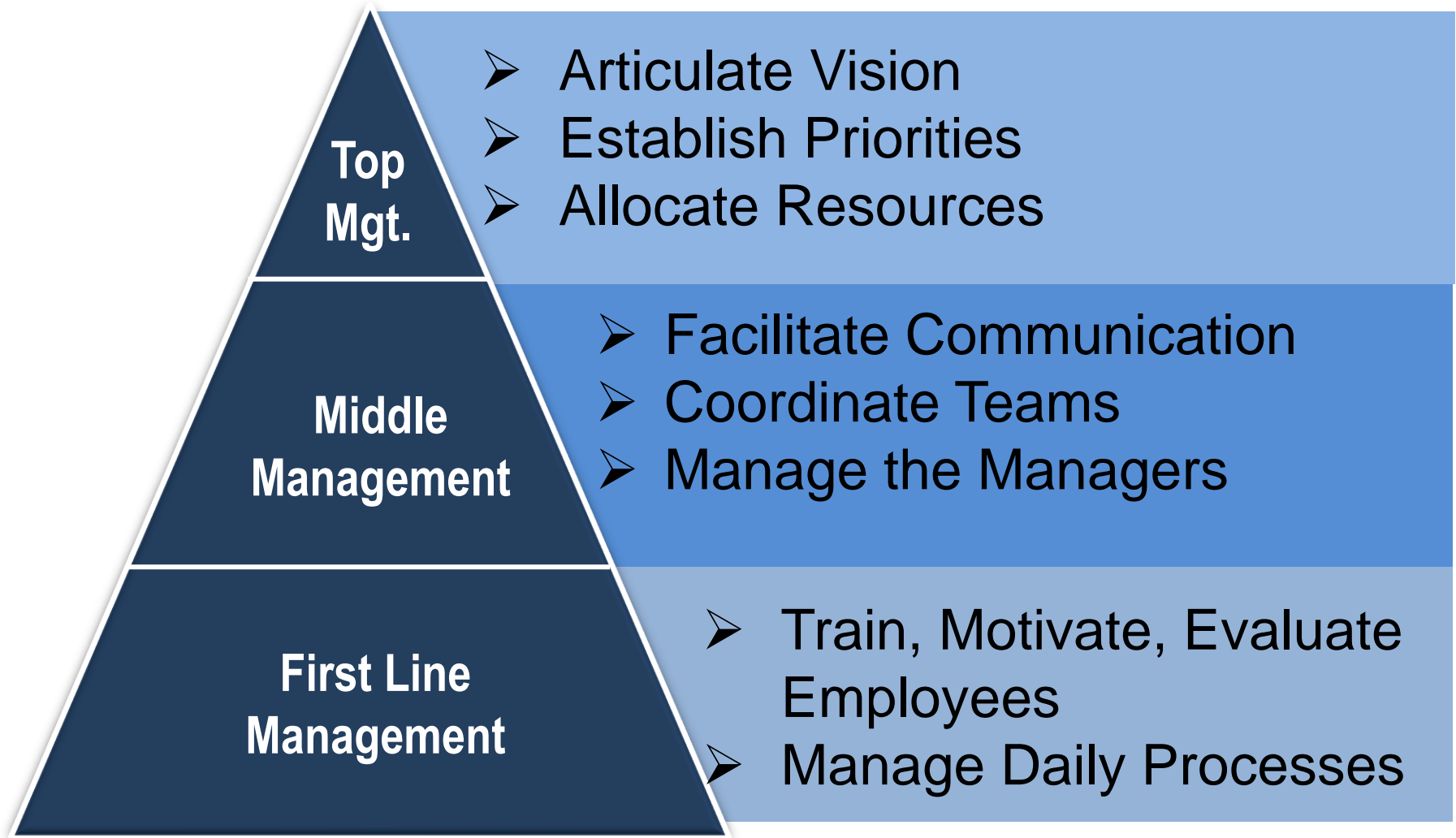
Organizing
Organizational structure

In **organizing**, managers create the structure of working relationships between organizational resources that best allows them to work together and achieve goals

Leading
Aligning resources



C. Levels of Management (in large companies)



C. Levels of Management (in large companies)



D. Management Skills

Technical Skills:

Expertise in a specific functional area (sales, accounting, programming...).



Human Skills:

Ability to work with and through other people in a range of different relationships.



Conceptual Skills:

Ability to grasp a big-picture view of the overall organization and the relationship between its parts.

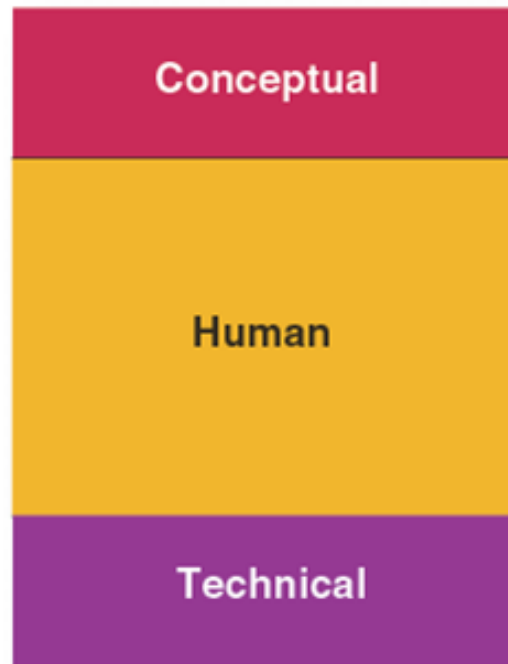


D. Management Skills

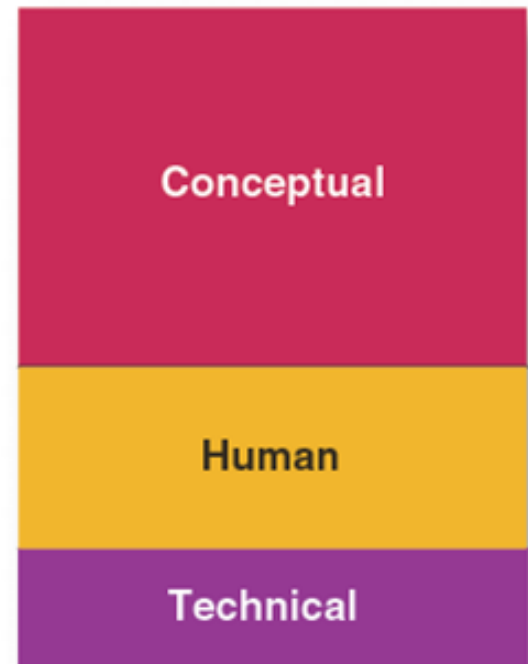
FIRST-LINE MANAGEMENT



MIDDLE MANAGEMENT



TOP MANAGEMENT



Lesson 4. Management

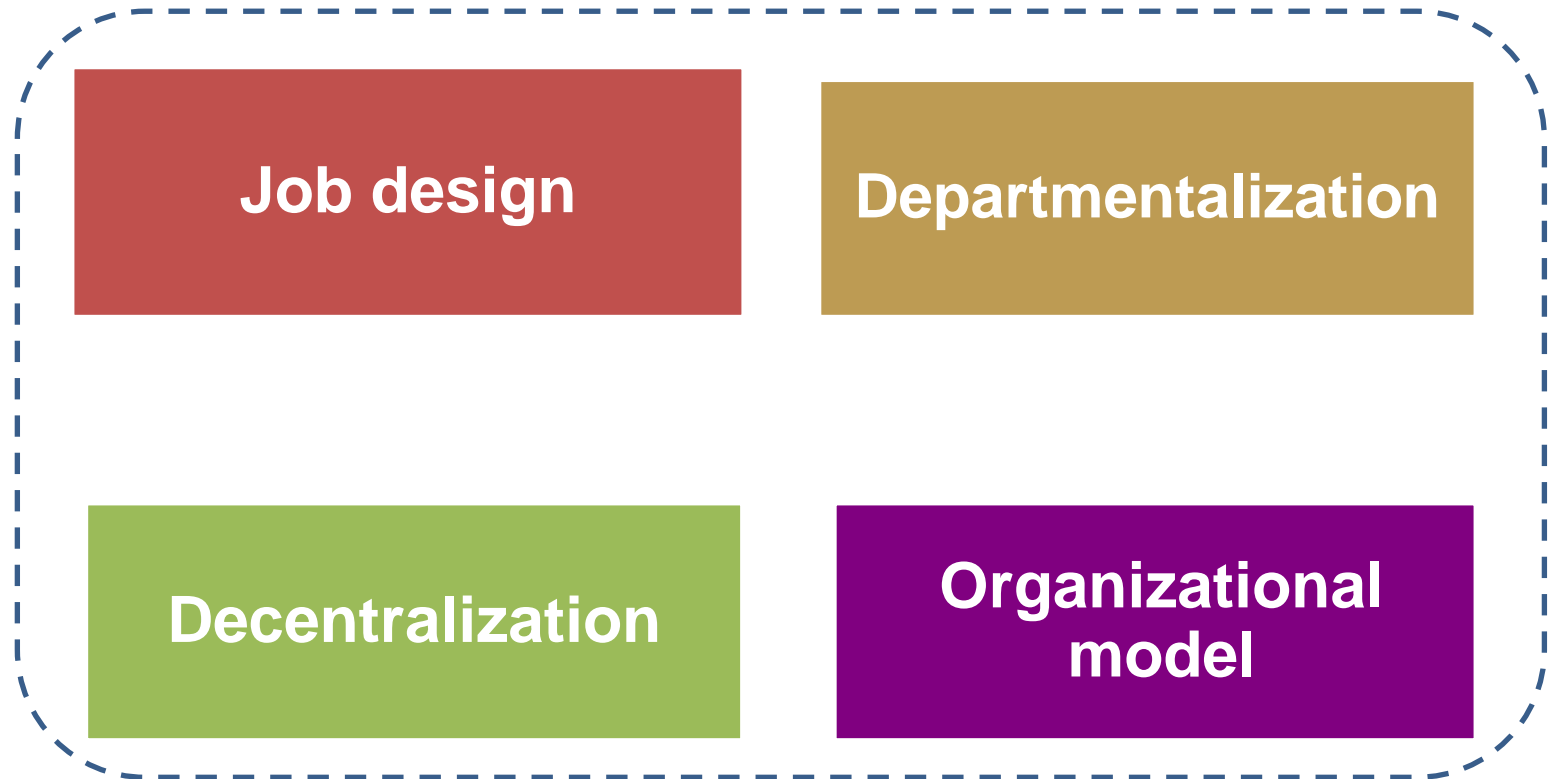
4.1. Management levels and functions

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The organizing function of management means **creating a logical structure of people, their jobs, and their patterns of interaction.**



A. Job design

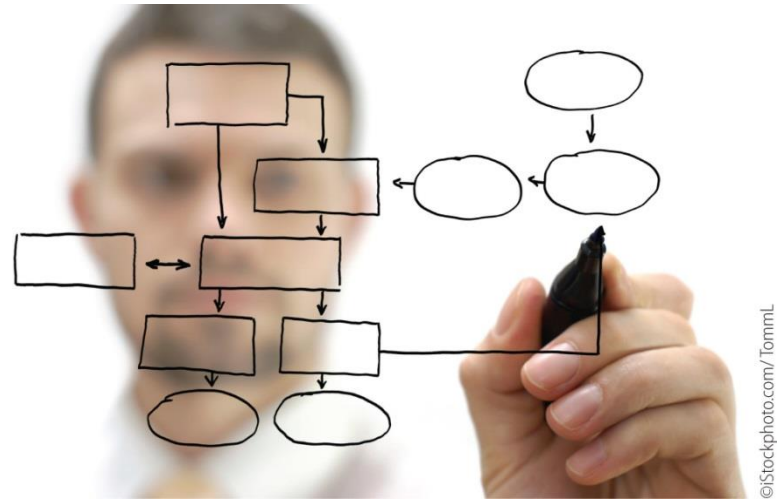
Specification of the contents, methods and relationships of jobs in order to satisfy:

- organizational requirements
- personal requirements of the job holder

Production process involves *tasks*
bundled into *jobs*

Job dimensions

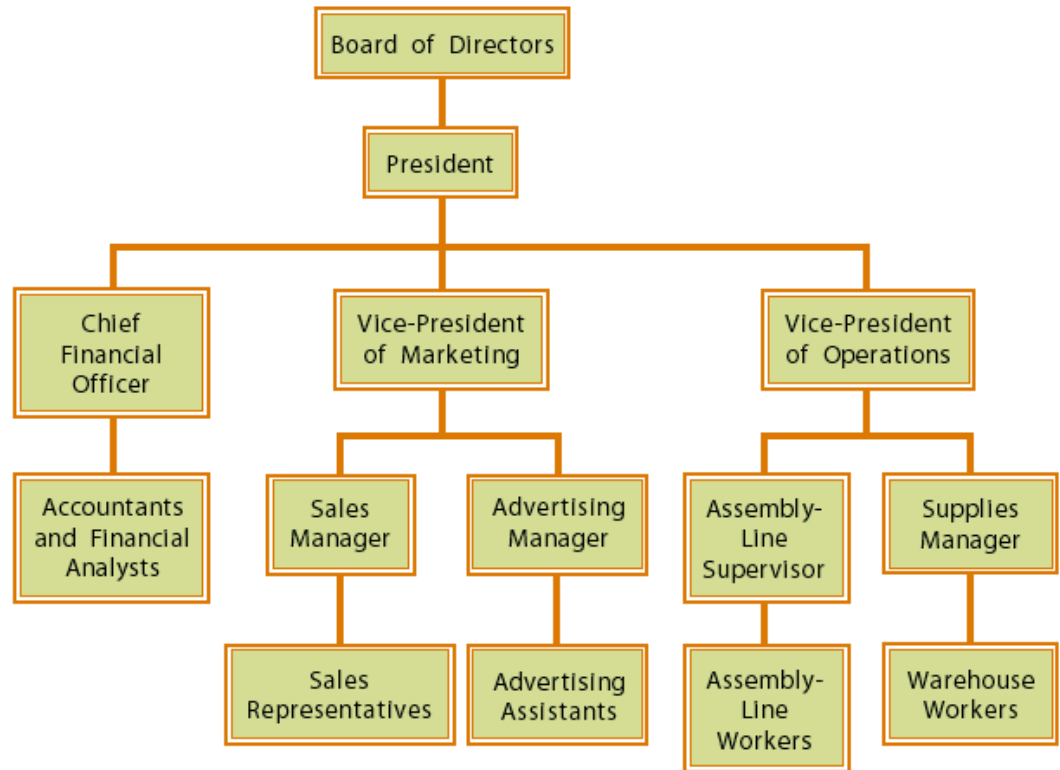
1. variety of tasks
few or many
2. decision authority
limited or broad



©iStockphoto.com/TommiL

In order to help employees understand how they and their jobs fit within the broader organization, most companies issue an **organization chart**.

This is a diagram of the company's **organizational design**, which shows the interaction among the different positions.



B. Departmentalization

It refers to the process of grouping jobs into departments.

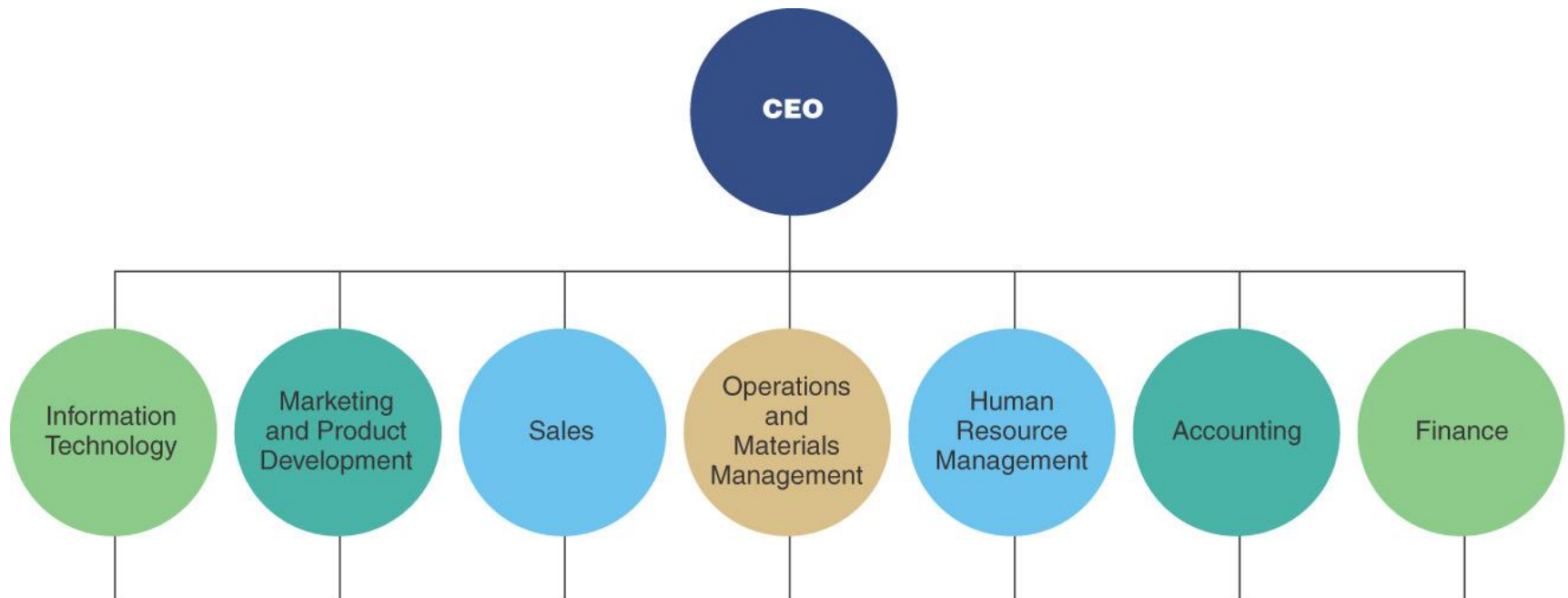
Common departmentalization criteria:

- Functional
 - Process
 - Product
 - Customer
 - Geographic
 - Hybrid
- Internal orientation*
- External orientation*



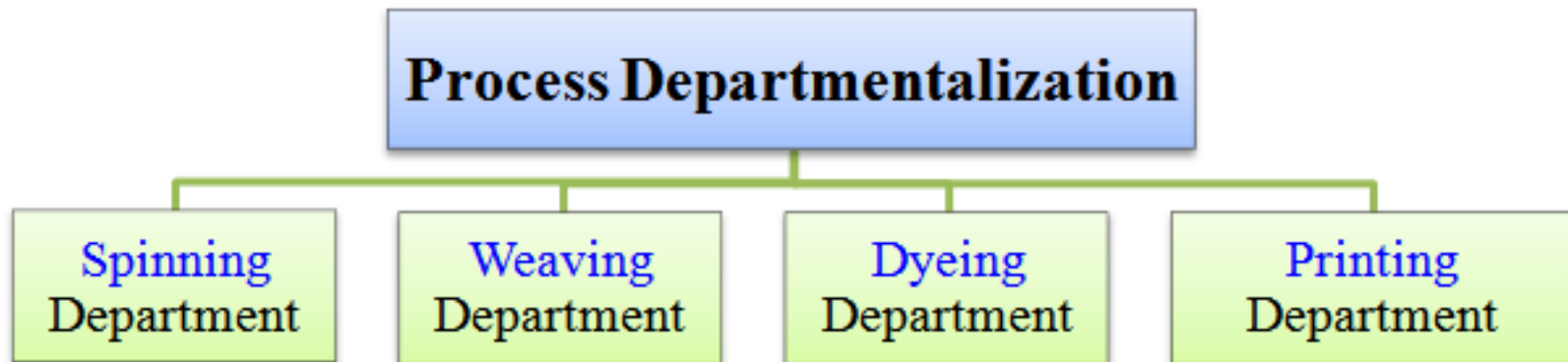
B. Departmentalization

Functional: Dividing employees into groups based on area of expertise. It tends to be efficient and easy to coordinate.



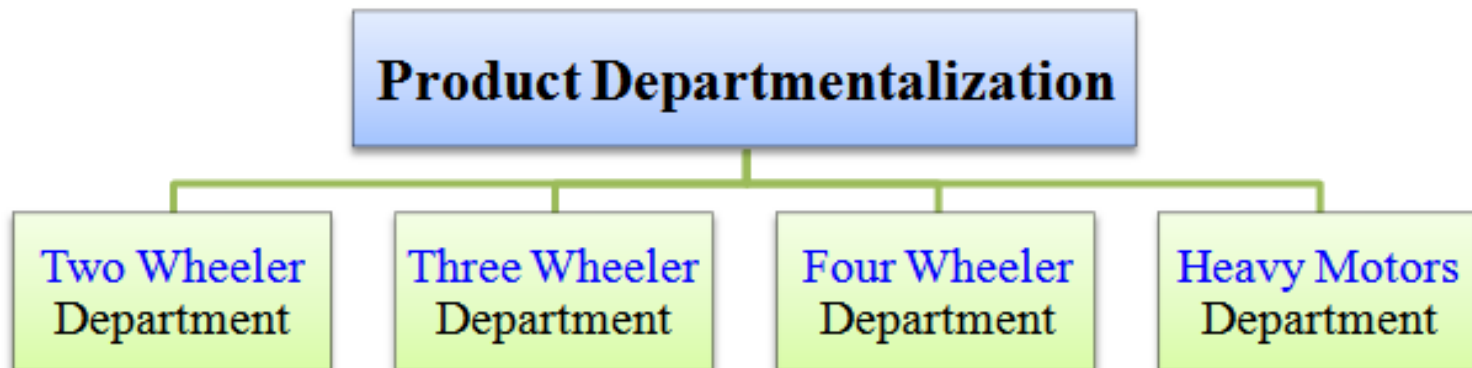
B. Departmentalization

Process: Dividing employees into groups based on what type of work employees do. It is common in manufacturing, where departments are divided by production processes.



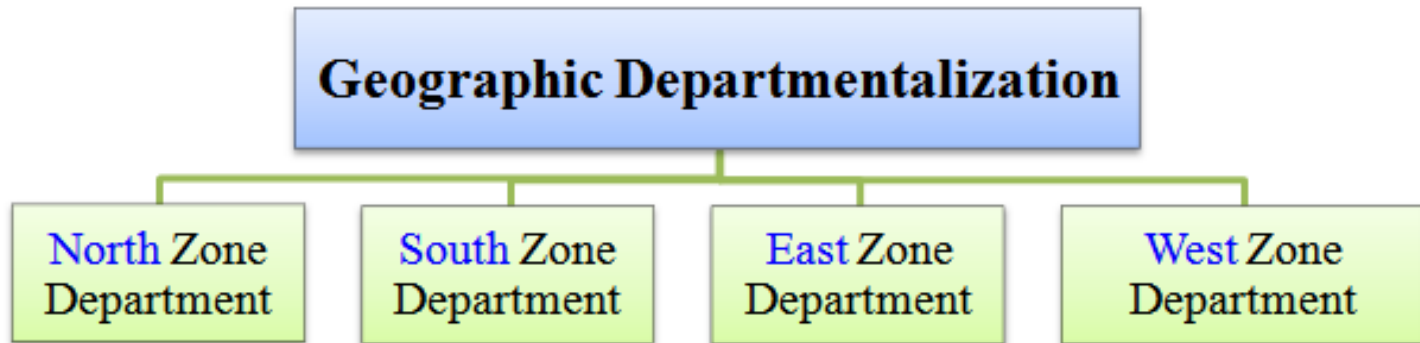
B. Departmentalization

Product: Dividing employees into groups based on the products the company offers. It leads the company to especially strong customer relations.



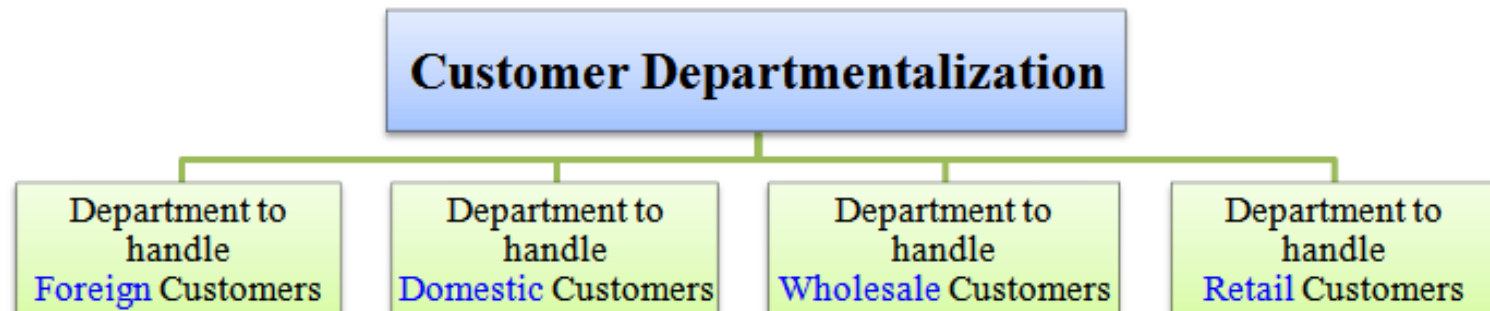
B. Departmentalization

Geographic: Dividing employees into groups based on where customers are located. It can lead the firm to better serve specific regions.



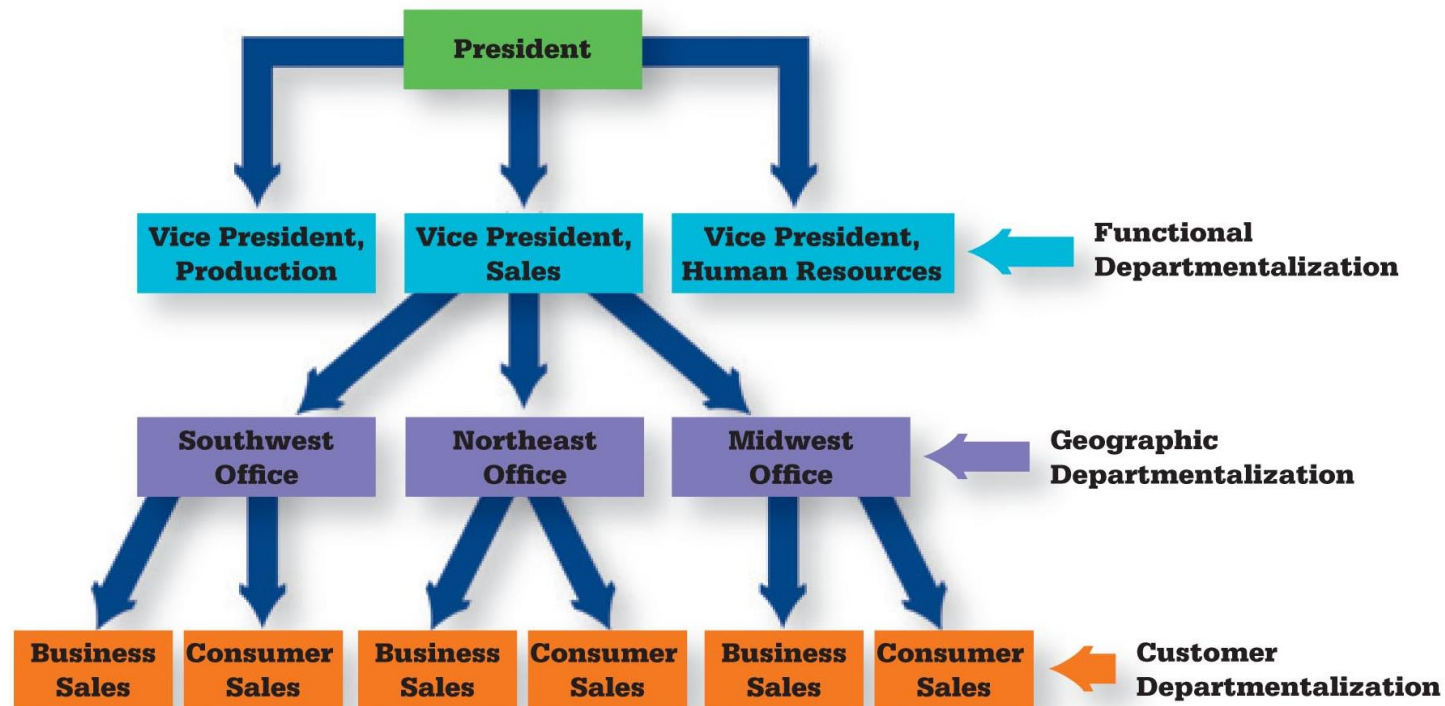
B. Departmentalization

Customer: Dividing employees into groups based on the customers that a company serves. It helps companies focus on the need of specific customer groups.



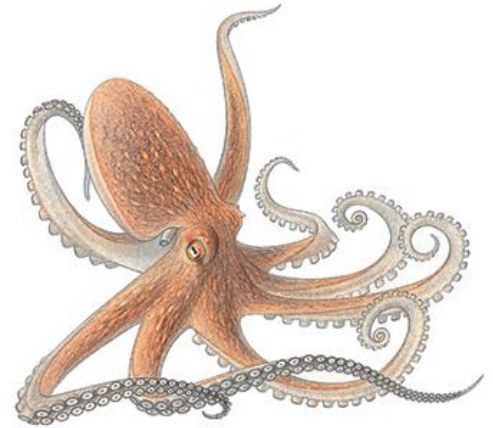
B. Departmentalization

Hybrid: As companies get larger, they usually adopt several types of departmentalization at different levels.



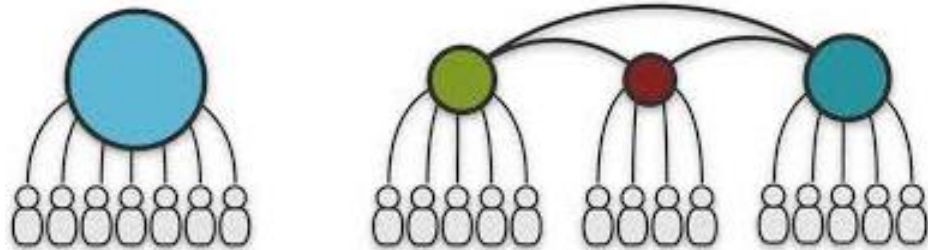
C. Degree of centralization

In a **centralized organisation**, the **top management** will retain the major **responsibilities** and **decision-making power**.



A **decentralized organisation** will **spread responsibility** and **decision-making power** across lower level managers.

C. Degree of centralization



PROS (DECENTRALIZATION)

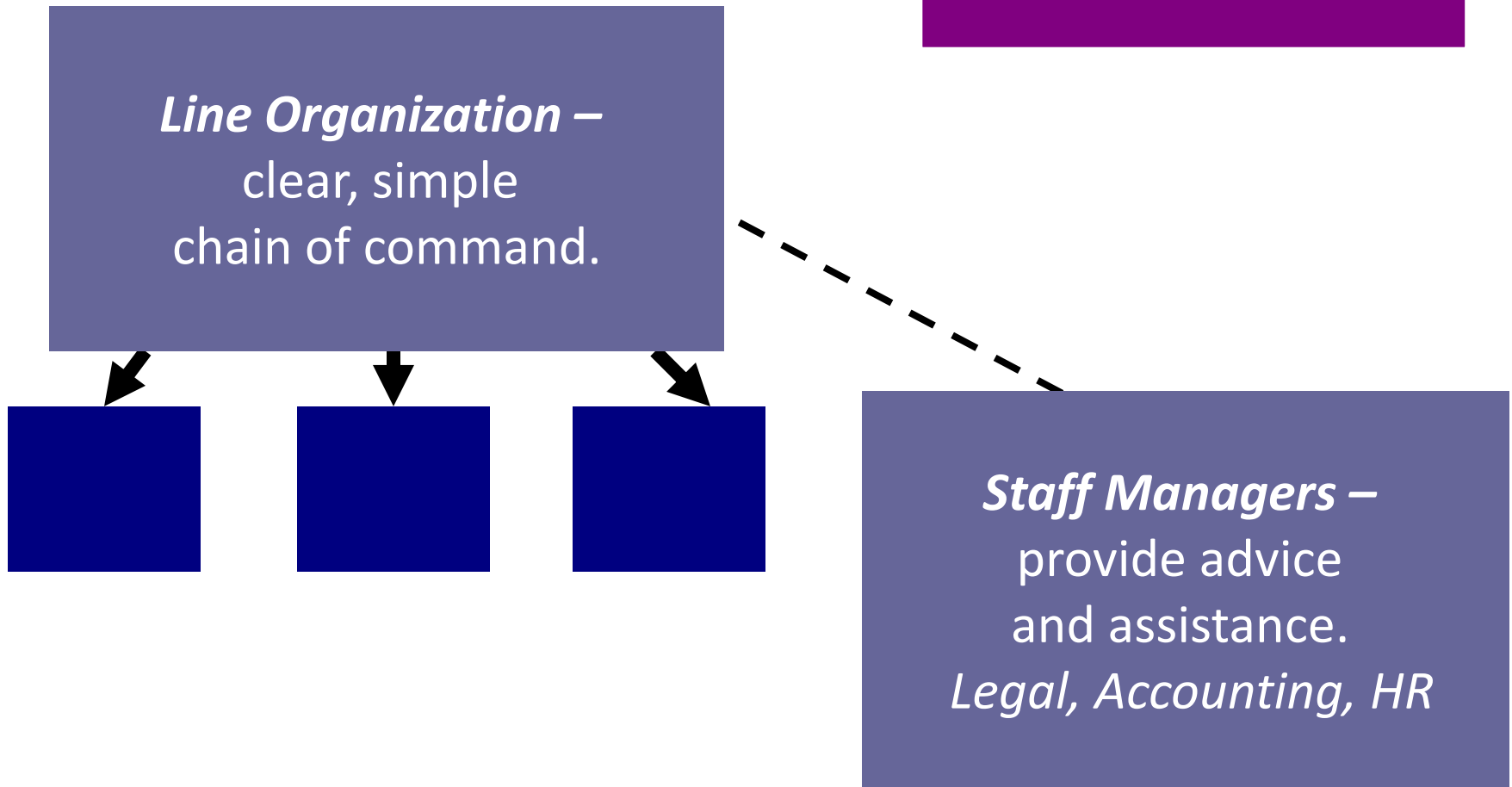
- *Effective use of local knowledge*
 - local tastes and preferences
 - price sensitivities of particular customers
- *Conservation of management time*
 - senior management focus on strategy
- *Training and motivation for local managers*

CONS (DECENTRALIZATION)

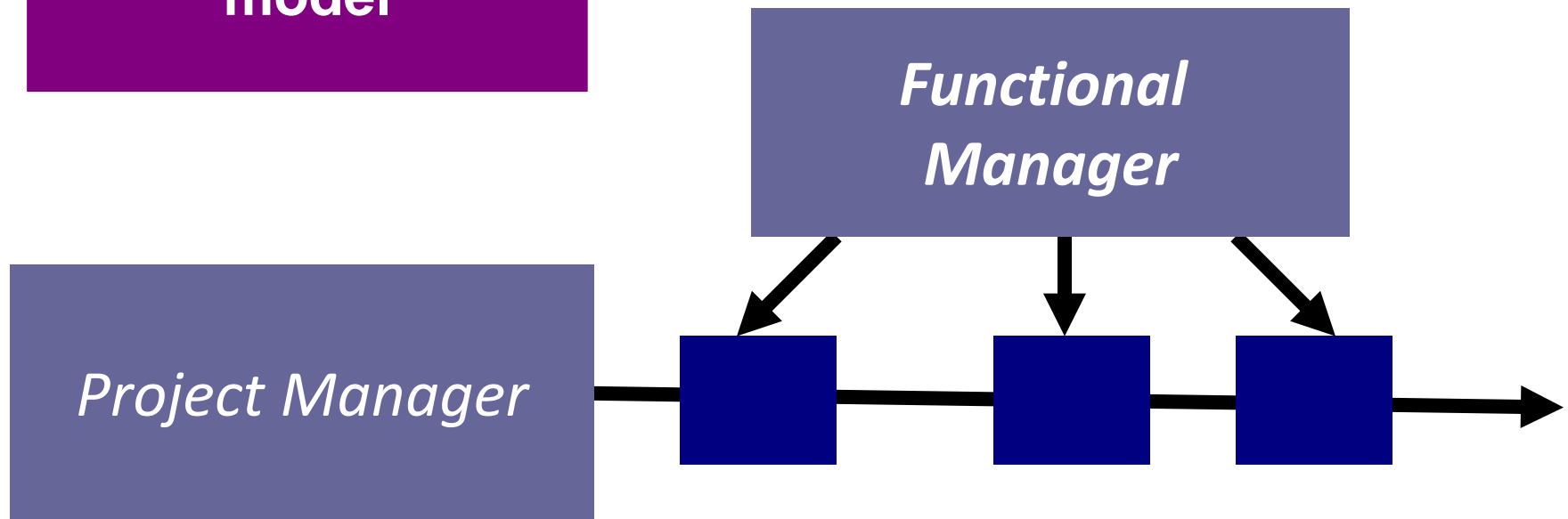
- *Potential conflict of interests*
 - effective control systems may be expensive
- *Coordination costs and failures*
- *Less effective use of central information*

In **decentralized organisations**, the organization chart tends to be more complex.

D. Organizational model



D. Organizational model



Matrix Organization –

- Brings together specialists to work on projects
- No clear chain of command
- Effective for project type work

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Human Resource Management

Human Resource Management (HRM) refers to nurture the firm's human investment so that it yields the highest possible return.

It consists of four main points:

- ❖ **Planning & Job Analysis**
- ❖ **Recruitment & Selection**
- ❖ **Training & Development**
- ❖ **Performance Appraisal & Compensation**



A. PLANNING & JOB ANALYSIS

Planning means determining the firm's human resource needs (type and number of employees).

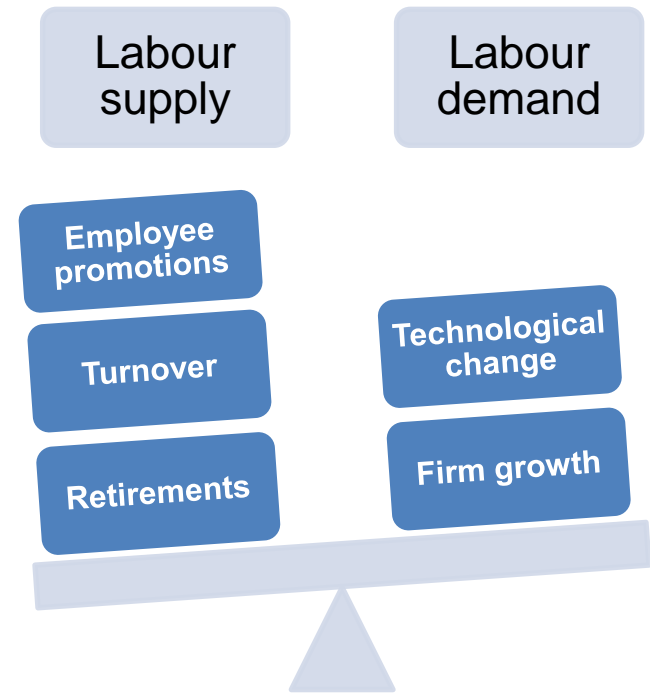
Job analysis is the process of describing and recording aspects of jobs and specifying the skills and other requirements necessary to perform the job.



A. PLANNING & JOB ANALYSIS

IMBALANCE?

Generate alternatives for reconciling supply and demand



Employee surplus ($S > D$):

Long-term options

Retirement incentives, permanent transfers...

Short-term options

Temporary shutdown, reduce work week...

Employee shortage ($S < D$):

Long-term options

Outsourcing, permanent hires...

Short-term options

Increase overtime, temporary hires...

A. PLANNING & JOB ANALYSIS

Job Analysis

- **Job description**
 - A list of the elements that make up a particular job
 - Duties to be performed, working conditions, the jobholder's responsibilities, the tools and equipment used on the job
- **Job specifications**
 - A list of the qualifications required to perform a particular job
 - Skills, abilities, education, and experience
- **Used for recruiting, selecting, evaluation, and compensation decisions**

A. PLANNING & JOB ANALYSIS

Job Analysis **BAND MANAGER**

<u><i>Job Description</i></u>	<u><i>Job Specifications</i></u>
<ul style="list-style-type: none">• Work with the music group to help make major decisions regarding the creative and business direction of the band	<ul style="list-style-type: none">• A bachelors degree in music management
<ul style="list-style-type: none">• Negotiate recording contracts and engagement fees	<ul style="list-style-type: none">• A minimum of three years experience managing a high-profile band
<ul style="list-style-type: none">• Help band members understand their rights and responsibilities	<ul style="list-style-type: none">• Excellent communication and networking skills

B. RECRUITMENT & SELECTION

Planning tells HR managers what the organization needs are

Job description documents the tasks that are expected to be performed within each position

Job specification is the list of skills, abilities and knowledge required for each job

Recruitment is the process of attracting qualified job applicants. The goal is to attract the “right” number of applicants.

Selection is the process of gathering information about the applicants and then using that information to choose the most appropriate applicant.

B. RECRUITMENT & SELECTION

Recruitment

Internal recruiting

transferring / promoting employees from within the company

Advantages:

- Boosts morale and helps retain quality personnel
- Proven track record
- Lower costs

External recruiting

looking for employees outside the firm.

Recruiting resources:

- ✓ Employment Websites
- ✓ Newspaper Ads
- ✓ Trade Associations
- ✓ Employment Centers
- ✓ Colleges/Universities
- ✓ Referrals

Advantages:

- Fresh perspectives and varied backgrounds
- Required skills

B. RECRUITMENT & SELECTION



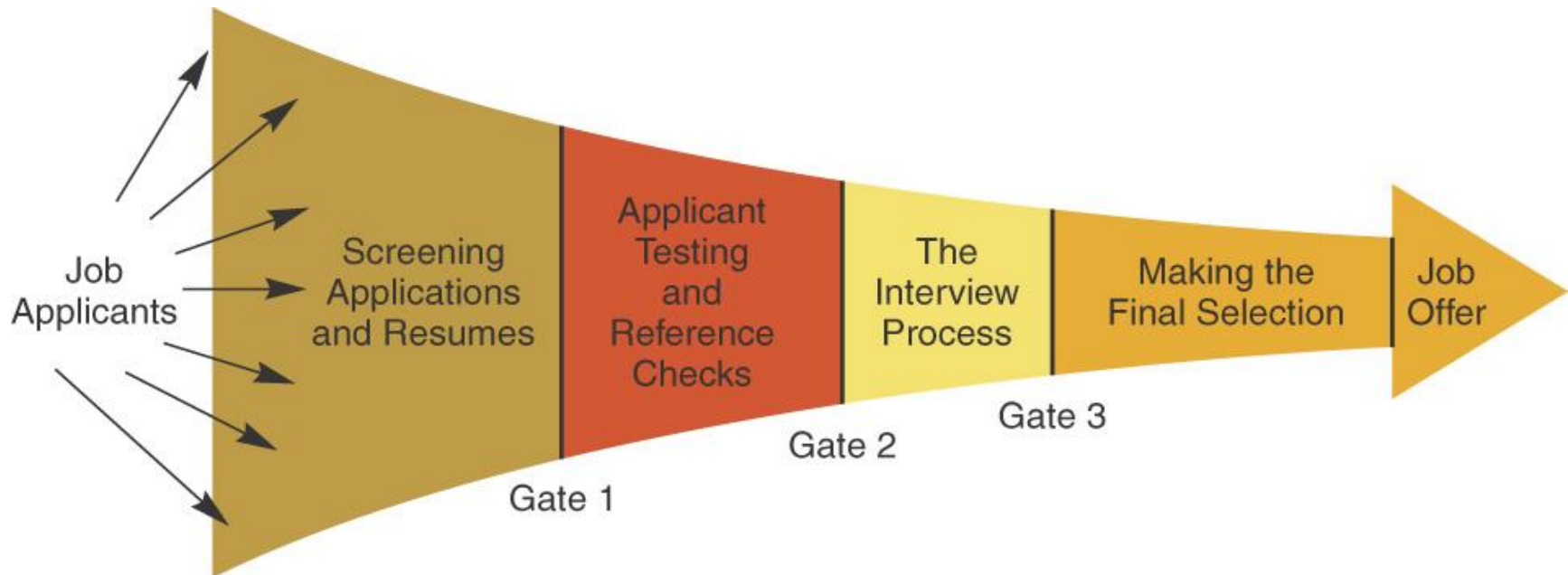
How to reach it?

- **Networking**
- **Spontaneous or unsolicited applications**

B. RECRUITMENT & SELECTION

Selection - Process

Collect all the information that is relevant from each recruit in order to make the final selection. This process usually entails four steps



B. RECRUITMENT & SELECTION

Selection - Tools for screening applicants

- **Employment applications**
 - Provide useful factual information about the applicant.
- **Employment tests**
 - Focus on aptitude, skills, abilities, and knowledge relevant to the job.
- **Interviews**
 - Opportunity for applicants and the firm to learn more about each other.
- **References**
 - Used to verify information furnished by the applicant about previous job responsibilities and the reason for leaving their previous job.
- **Assessment centers**
 - Employees participate in simulated management activities and are observed and evaluated by other senior managers.

B. RECRUITMENT & SELECTION

Interview typical questions

EXAMPLE

1. Tell me about yourself.
2. What do you know about our organization?
3. What can you do for us? Why should we hire you?
4. What qualifications do you have that make you feel that you will be successful in your field?
5. What have you learned from the jobs that you have held?
6. If you could write your own ticket, what would be your ideal job?
7. What are your special skills, and how did you acquire them?
8. Have you had any special accomplishments in your lifetime that you are particularly proud of?
9. Why did you leave your most recent job?
10. How do you spend your spare time? What are your hobbies?
11. What are your strengths and weaknesses?
12. Discuss five major accomplishments.
13. What kind of boss would you like? Why?
14. If you could spend a day with someone you have known or known of, who would it be?
15. What personality characteristics rub you the wrong way?
16. How do you show your anger? What type of things make you angry?
17. With what type of person do you spend the majority of your time?
18. What activities have you ever quit?
19. Define cooperation.

Sources:
Adapted from
Susan D. Greene
and Melanie C. L.
Martel, *The
Ultimate Job
Hunter's
Guidebook*, 5th
ed. Copyright ©
2008 by
Houghton Mifflin
Company, pp.
196–197. Used
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C. TRAINING & DEVELOPMENT

Training and development must gather speed for companies and individuals to maintain their competitive edge. Experts offer four main reasons:



- ✓ Increase innovation
- ✓ Increase technology adoption
- ✓ Increase productivity
- ✓ Increase motivation

C. TRAINING & DEVELOPMENT

Types of training

- **Orientation**, focused on introducing new employees to the company culture.
- **On-the-job training**, where employees begin their jobs and learn as they go (sometimes under the guidance of more experienced employees).
- **Off-the-job training**, aimed at teaching new topics (computer programs, negotiation skills, languages...) through either classroom training or computer-based training.



D. PERFORMANCE APPRAISAL & COMPENSATION

Performance appraisal

Process through which managers review and evaluate the contributions of employees to firm goals.

Through frequent feedback, it can be a powerful tool to improve employee performance.

Typically, managers conduct the appraisals by sitting down with each employee on a one-to-one basis and comparing actual to expected results.



D. PERFORMANCE APPRAISAL & COMPENSATION

Compensation



Reward associated to each job within the organization. Fair compensation is able to **attract and retain** the employees that best match job specifications. The level and composition tend to attract and retain particular profiles, whereas the function (relationship between effort and reward) tends to encourage effort.

Pay structure: combination of payments made to the employee (different from pay level):

Direct compensation: monetary rewards.

Indirect compensation: employee benefits.

D. PERFORMANCE APPRAISAL & COMPENSATION

Direct compensation

Salary

A specific amount of money paid for an employee's work during a specific period.

Incentive payment

An additional payment related to an achievement.



D. PERFORMANCE APPRAISAL & COMPENSATION

Indirect compensation (benefits)

- **Pay for time not worked**

Vacation time, holidays, parental and sick leave

- **Legal compensation**

Unemployment insurance, and Social Security

- **Other benefits (perquisites or perks)**

Pension and retirement programs, health insurances, child care, company cafeterias...



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A. The current role of Information and Communication Technologies (ICTs)

Over the past few decades, **computer and communications hardware and software** have changed dramatically. Perhaps and even more important development is the degree to which today's technology is linked by **networks**.

This has not only improved the efficiency of existing businesses, but ICTs have also opened up entirely new **business opportunities**.

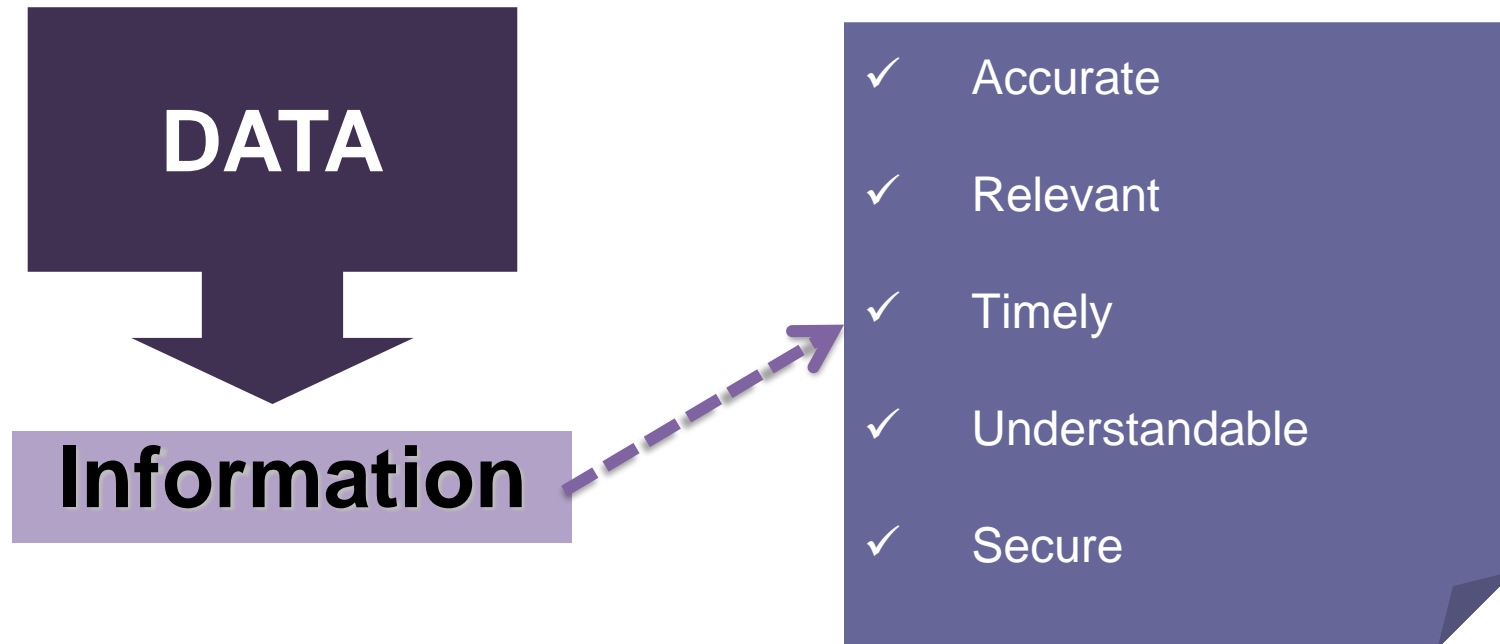


*ICTs can build a
competitive advantage
by means of providing information for
decision making*

A. The current role of Information and Communication Technologies (ICTs)

Information Technology and Decision Making: A Crucial Aid

Managers need information to make good decisions



B. Networks

Today, most firms use networks that allow users to communicate with each other and share both files and hardware resources.

Intranet is a network that has the same look and feel as the Internet but is limited to a single firm's internal Web servers.

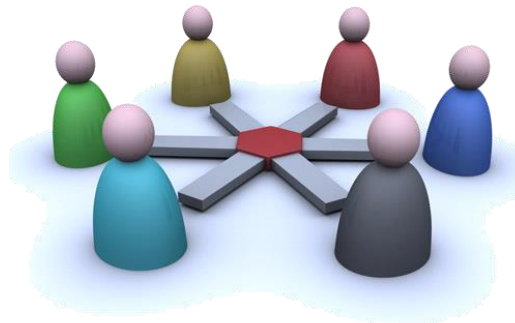


Extranets are open intranets that provide limited access to certain group of stakeholders, such as key customers and suppliers.

B. Networks

Benefits of networks

- Information networks are leading to businesses with **simpler organizational structures** because networked firms can maintain electronic information linkages.
- **Improved management processes** are feasible because managers have rapid access to more information
- **Operations are more flexible** because greater collaboration is possible, both among internal units and with outside firms



C. ERP Systems

Enterprise resource planning (ERP) systems are multi-module applications software that **links all functional activities to manage the business.**

ERP software consists of many modules that are individually purchased. Each one is focused on one area of business processes, such as product development, marketing.... They **smooth the flow of data across the organization.**

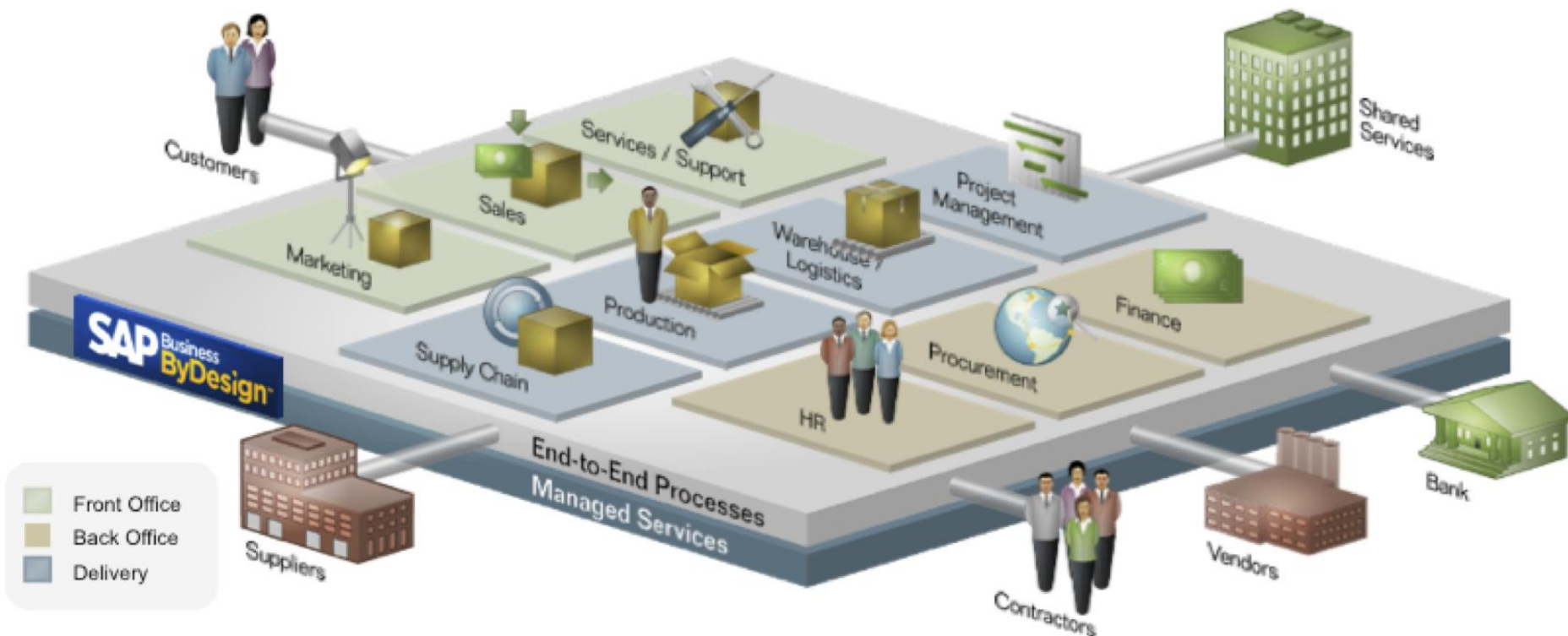


Suppliers of software

SAP (SAP R/3)
Oracle (Oracle Manufacturing)
PeopleSoft (PeopleSoft)
JD Edwards (World)
Baan (Triton)
QAD (MRG/PRO)

C. ERP Systems

SAP Business ByDesign is a fully integrated system. All process steps within a business scenario are executed in one single system and all subsequent data is connected to each other.



D. Cloud computing

Cloud computing uses Internet-based storage capacity, applications, and processing to supplement internal computer resources

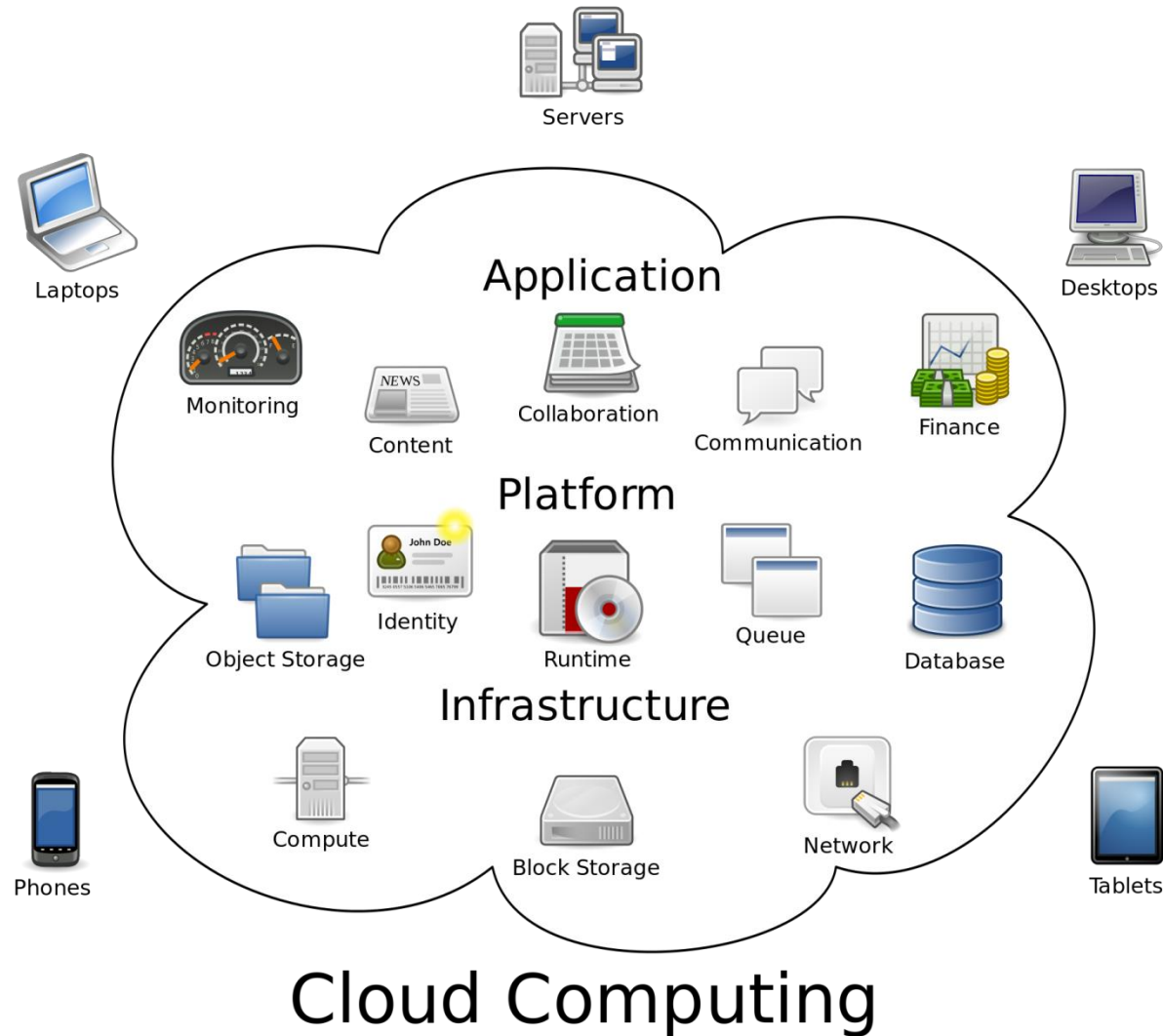
Businesses have been reluctant to embrace cloud computing because of security and reliability

But, cloud computing have proven advantages:

- ✓ Financial benefit
- ✓ Flexibility
- ✓ Encourage collaboration
- ✓ Processing speed

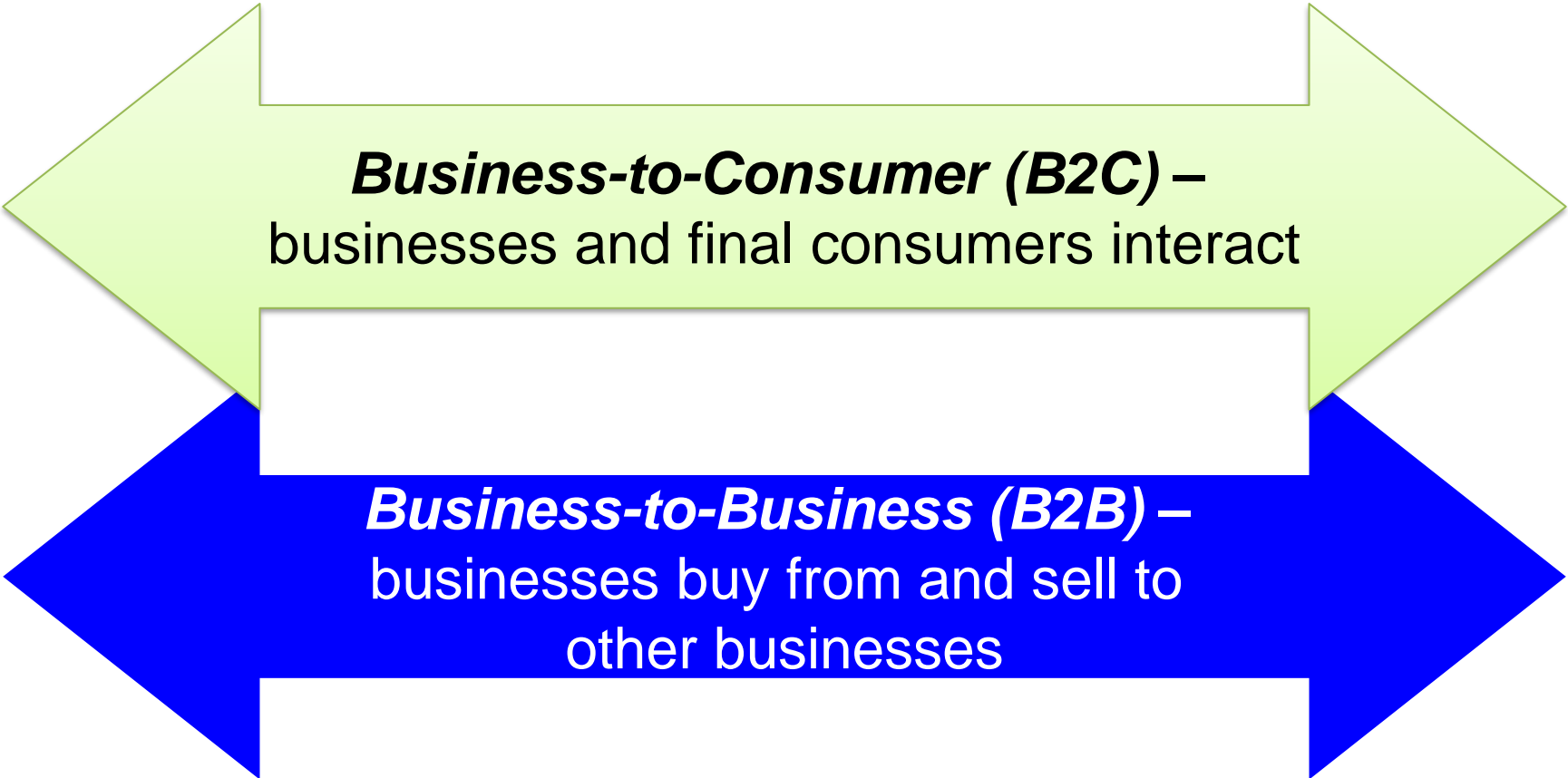


D. Cloud computing



E. E-Commerce

E-commerce – using the Internet to facilitate the exchange of goods and services



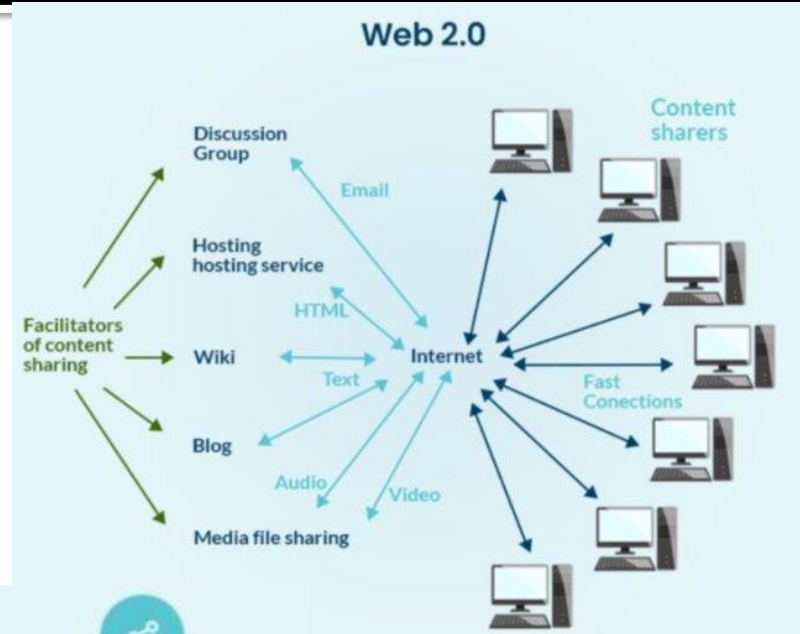
The diagram consists of two large, horizontal, double-headed arrows. The top arrow is light green and contains the text for Business-to-Consumer (B2C). The bottom arrow is blue and contains the text for Business-to-Business (B2B). Both arrows are centered and point outwards to the left and right.

Business-to-Consumer (B2C) –
businesses and final consumers interact

Business-to-Business (B2B) –
businesses buy from and sell to
other businesses

E. E-Commerce

- ✓ Web 2.0 allows businesses to facilitate relationships with customers and rich experiences
- ✓ Social media



Using Information Technology in the B2C Market

Social media

Online interactions that allow people and businesses to communicate and share ideas, personal information, and information about products and services.

More than two-thirds of online adults use some sort of social media platform like Facebook, LinkedIn, or Twitter.

En sentido amplio, una red social es una estructura social formada por personas o entidades conectadas y unidas entre sí por algún tipo de relación o interés común. El término se atribuye a los antropólogos británicos Alfred Radcliffe-Brown y John Barnes.

Podemos definir las redes sociales on-line como estructuras sociales compuestas por un grupo de personas que comparten un interés común, relación o actividad a través de Internet, donde tienen lugar los encuentros sociales y se muestran las preferencias de consumo de información mediante la comunicación en tiempo real, aunque también puede darse la comunicación diferida.

(Fuente: Monográfico: Redes Sociales, Isabel ponde-kidatzia)

Plataforma digital de comunicación global que pone en contacto a gran número de usuarios.

(Real Academia Española, 2016).

¿Qué debería cumplir una red social?

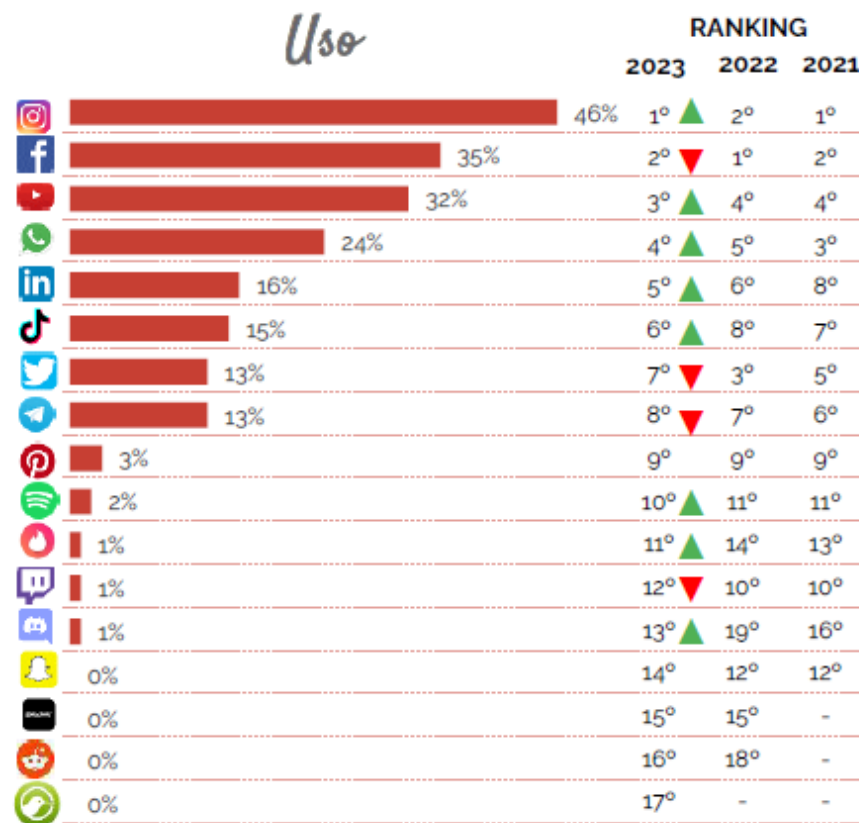
- Ser una red de contactos
- Tener un perfil
- Permitir interactuar
- Ofrecer funcionalidades sociales para interactuar con contenidos (crear, compartir y/o participar)

(Fuente: Comisión Redes Sociales IAB Spain)

Social Media in Spain (commercial use)

Instagram y Facebook lideran la lista de uso a nivel comercial, manteniendo sus niveles con respecto a 2022.

Le siguen **YouTube, WhatsApp, LinkedIn y TikTok**, que mejoran su posición en el ranking respecto al año pasado.



- The intensity of brand following on social networks increases
The intensity of influencer tracking on social networks is maintained.
One out of two do so.
One out of every two users is disturbed by advertising on social networks

Aumenta la intensidad de seguimiento de marcas en Redes Sociales

- **Amigos, familiares y conocidos** siguen siendo **las cuentas más seguidas** en Redes Sociales (96%), seguidas de **influencers** (51%) y **perfiles de marcas** (43%, -5pp vs 2022).
- Aunque las cuentas de marcas se siguen algo menos que el año pasado, **aumenta significativamente la frecuencia con la que los seguidores utilizan las redes para seguir este tipo de cuentas**: el **45% utiliza las Redes Sociales mucho o bastante** para seguir a marcas (vs 32% en 2022).
- Los sectores de '**Entretenimiento, cultura y medios**' y '**Viajes, transporte y turismo**' siguen siendo los más seguidos en Redes sociales.
- **Aumenta el nivel de confianza en las marcas con perfil en Redes Sociales** (+11pp respecto a 2022), entre aquellos que siguen alguna marca.

Se mantiene el seguimiento de influencers en Redes Sociales: 1 de cada 2 usuarios lo hacen

- **Instagram** sigue siendo la red **dónde más se sigue a los influencers** (70%), especialmente las mujeres y los internautas de 18-24 años. A gran distancia le sigue **YouTube** (41%) y en tercer puesto **TikTok** (29%), consiguiendo pasar a Facebook (19%).
- **La credibilidad** de este tipo de cuentas **cae bruscamente respecto a 2022**: solo 3 de cada 10 (-19pp vs 2022) consideran que son creíbles.

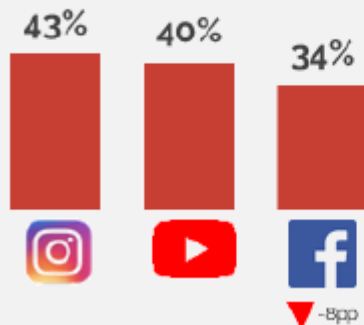
A 1 de cada 2 usuarios les molesta ver publicidad en Redes Sociales

- Un año más, **seguimos siendo reacios a ver publicidad en Redes Sociales y aumenta el rechazo a ver publicidad según nuestros intereses**: al **45% de los usuarios le molesta** que salga este tipo de publicidad mientras están conectados a sus Redes Sociales (34% en 2022).



1 Búsqueda de información

Un 44% declara buscar información en Redes Sociales antes de realizar una compra.
Las principales Redes Sociales donde se busca información son:



2 Influenciadores

El 31% de los usuarios deja comentarios, opiniones, expone sus problemas en Redes Sociales.

Un 42% valora positivamente que otros usuarios dejen comentarios de productos y/o servicios y un 45% afirma que estos comentarios le influyen mucho o bastante a la hora de acabar realizando la compra.

El papel de las Redes Sociales en el proceso de compra es principalmente proporcionar información de productos y servicios, ayudar a comparar alternativas y comentar o compartir la compra.



3 Compra

Para el 21% de los usuarios las Redes Sociales son un canal para realizar la compra.



F. Internet of Things (IoT)

The IoT has been defined as “the use of sensors, actuators, and data communications technology built into physical objects that enable those objects to be tracked, coordinated, or controlled across a data network or the Internet.” (McKinsey Global Institute 2013, p.51) While the Internet revolutionized the way people do business via connecting personal computers, mainframes and other business IT infrastructure, the IoT may bring further incremental change to businesses and consumers alike via connections among physical objects (Ashton 2009) previously unconnected and were thought unconnectable, such as cars, houses, gas turbines and even dental implants.



F. Internet of Things (IoT)

A connected intelligent product (IoT) is one that captures, stores and transmits information thanks to its particular composition adding services to traditional products (Porter and Heppelmann, 2014). Unlike the latter, which have only the physical component, interconnected products have two additional factors, intelligence and connectivity than assist managers in different areas.

Año 2022 ➔ 18 billones de dispositivos inteligentes conectados en el mercado (Novo, 2018)

¿Qué son los productos inteligentes conectados?



- Captan, transmiten y almacenan información
- Incorporan nuevas funcionalidades

Beneficios
consumidores

Beneficios y cambios
estratégicos fabricantes

FOREO



SISREM
Monitorización y actuación en plantas industriales

 Industrial Internet of Things

 Big Data Analytics

 Interfaces usuario



SISTER
Monitorización de embarrados en estaciones eléctricas

 Tecnologías de visión

 Industrial Internet of Things

 Integración de sistemas



SISMETER
Digitalización y análisis de medidores analógicos

 Tecnologías de visión

 Industrial Internet of Things

 Big Data Analytics



SISDRON
Supervisión aérea de plantas industriales

 Drones

 Tecnologías de visión



Key concepts

Managerial functions: planning, organizing, leading and controlling

Top, middle and first line managers

Management skills: technical, human, and conceptual

Organization chart

Functional, product, customer, geographic and process departmentalization

Centralization and decentralization

Human Resource Management (HRM)

HR Planning

Job analysis: description and specification

Recruitment: internal and external

Selection: process

Training and types

Performance appraisal

Compensation: direct and indirect

ICT networks: intranet and extranet

ERP systems

Cloud computing

E-commerce: B2B and B2C

IoT