



# Management Information Systems

## Lecture 5: Enterprise Systems

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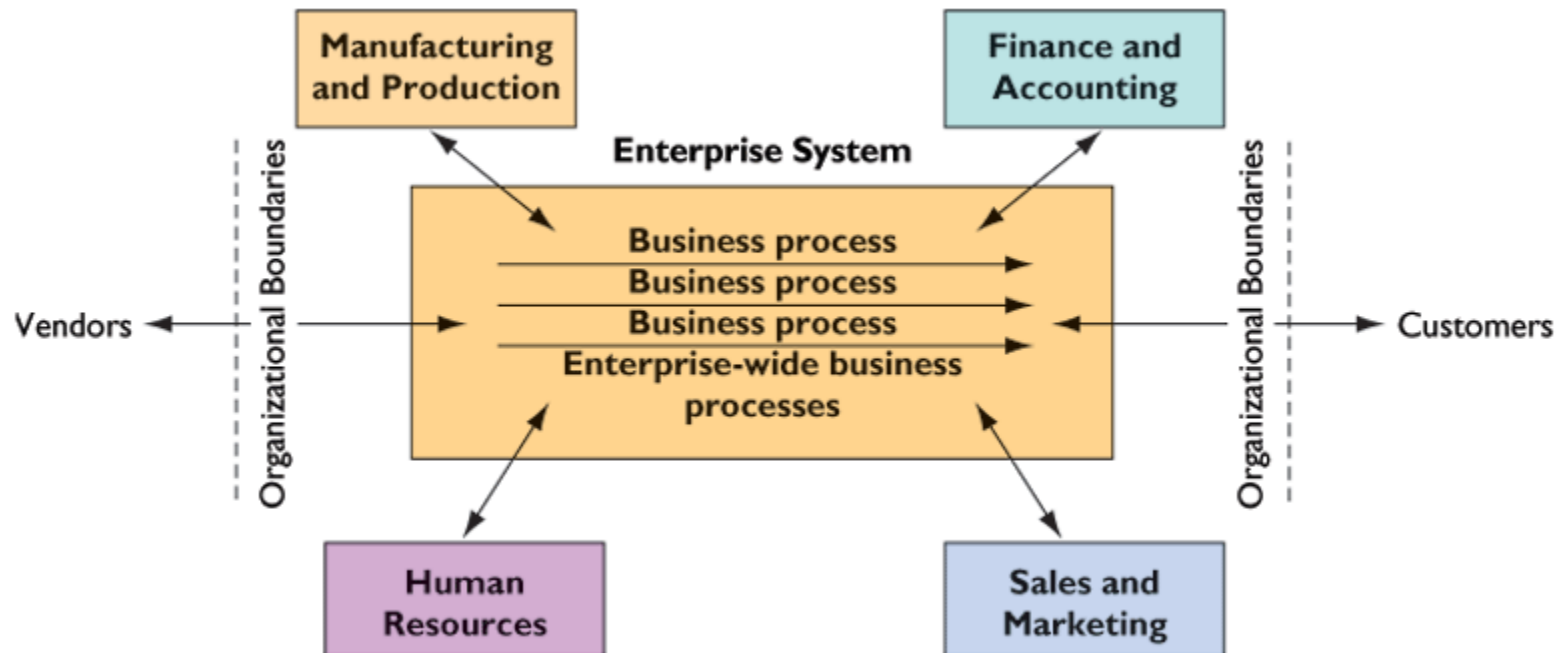


# MAIN POINTS

- Enterprise Systems and the role they play in integrating business processes
- Different types of enterprise systems.

- ◆ Enterprise systems **integrate** the key business processes of an organization into a **single software system**.
- ◆ Data from various functional areas are **maintained centrally** where they can be accessed and used by other functions and cross-functional processes.
- ◆ This changes the work flow of an organization. Now information can **seamlessly flow throughout** the organization, **improving coordination, efficiency, and decision making**.

# Enterprise systems



# Enterprise Systems

- ◆ **Integration** – Allows separate systems to *communicate directly with each other*, eliminating the need for manual entry into multiple systems
- ◆ **E-integration** - *use of the Internet* to provide customers with the ability to *gain personalized information* by querying corporate databases and their information sources.



# Enterprise Systems

- *Resolves problem of fragmented data*
- **Enable:**
  - ◆ *Coordination* of daily activities
  - ◆ *Efficient response* to customer orders (production, inventory)
  - ◆ *Help managers make decisions* about daily operations and longer-term planning

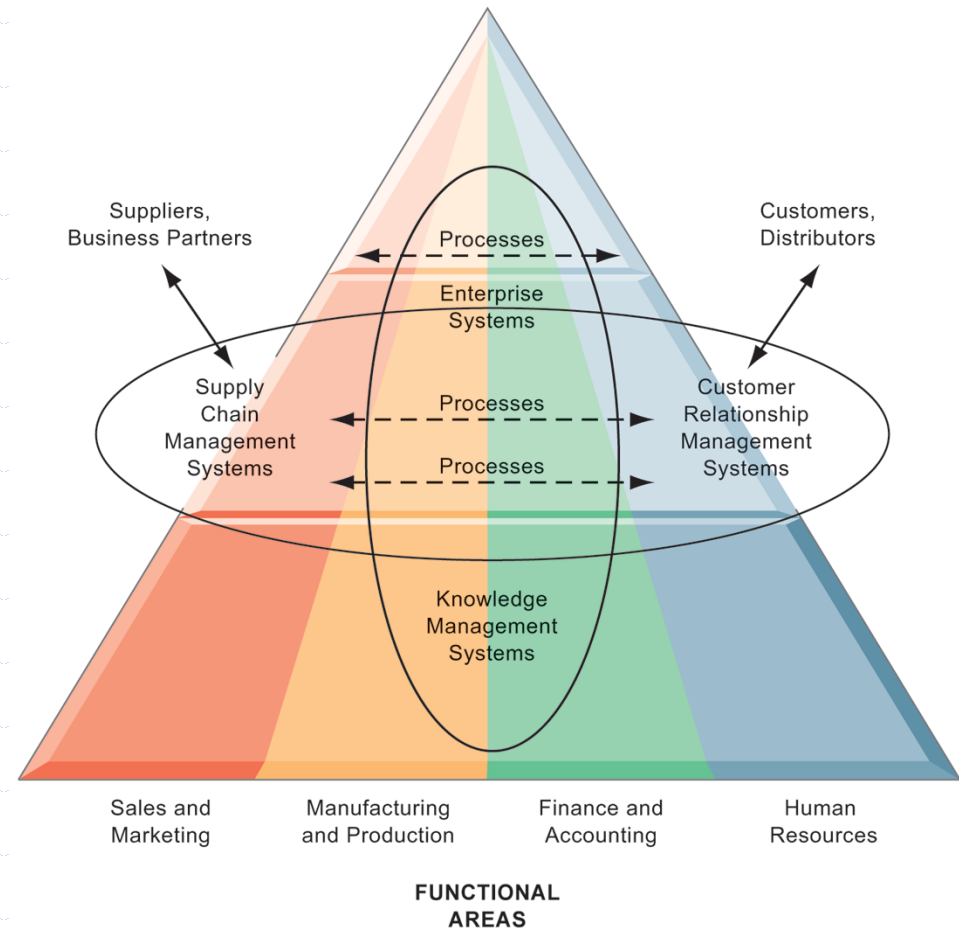
# Enterprise Systems

Refer to this Pyramid illustration,  
notice both the

- ◆ *integration across the firm (different functions),*
- ◆ *integration at different organizational levels,*
- ◆ *as well as with suppliers and customers (CRM and SCM).*

**Remember that  
an Enterprise System is an  
Information System.**

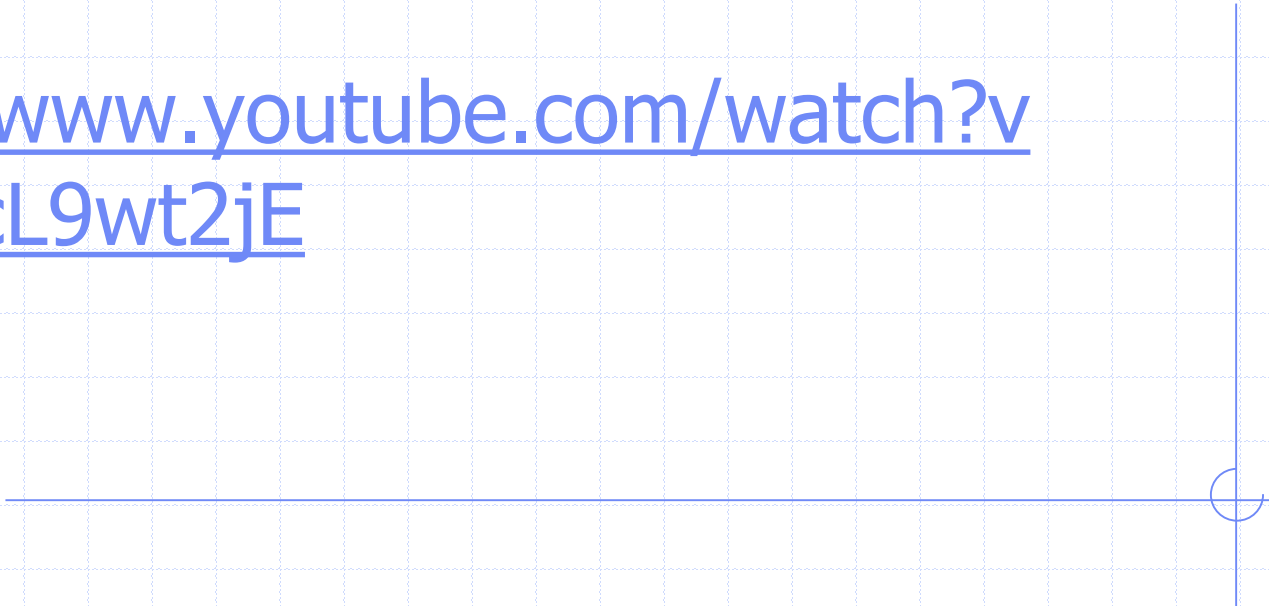
It is ***an Enterprise-Wide  
Integrated Information System***  
(that *integrates  
standalone/functional  
Information Systems*).





# Visit the followings: EIS

<http://www.youtube.com/watch?v=CMgcL9wt2jE>

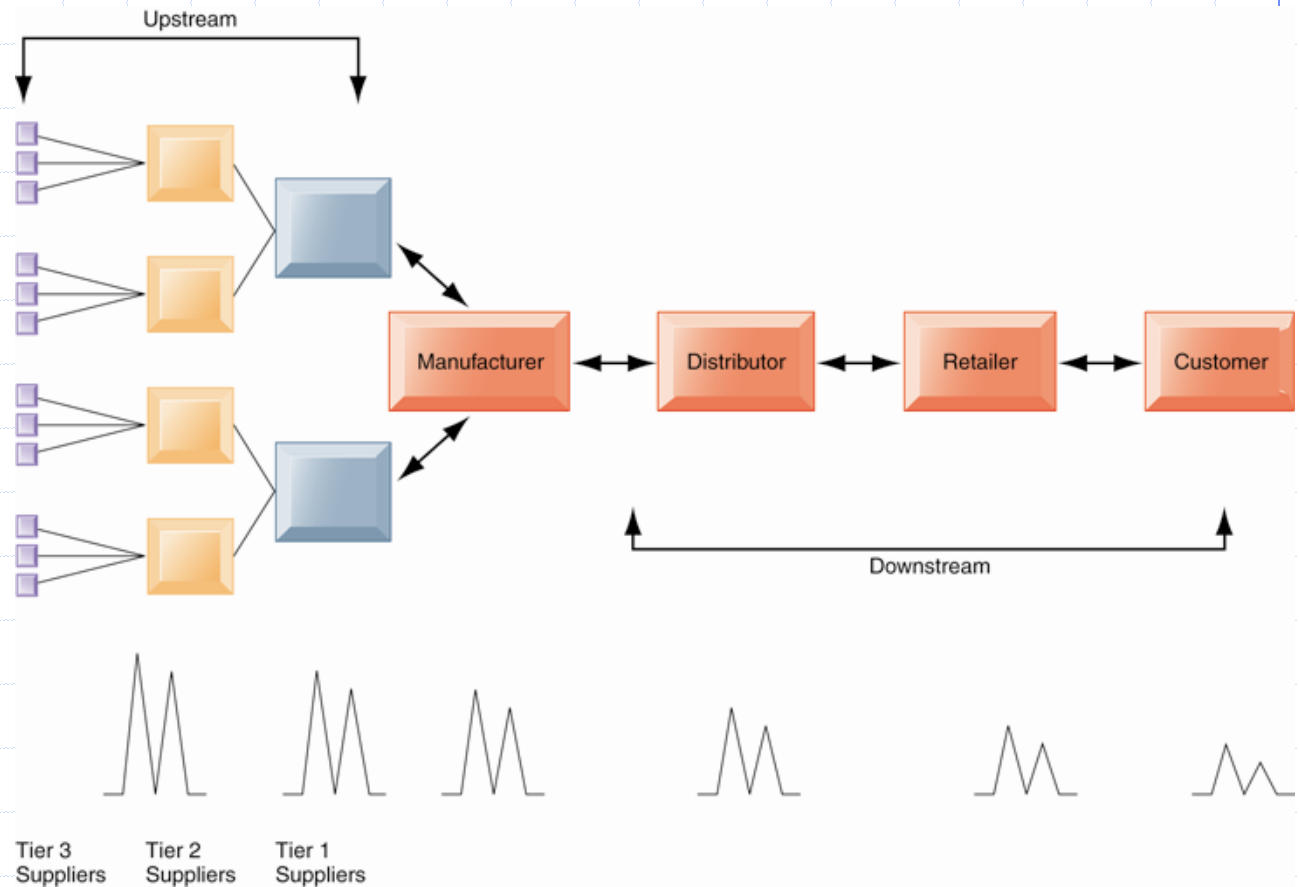


# Three Primary Enterprise Systems



**Supply Chain Management (SCM)** – *The management of information flows* between and among activities in a supply chain to maximize total supply chain *effectiveness and profitability*

**Inaccurate information** can cause minor fluctuations in demand for a product to be amplified as one moves further back in the supply chain. Minor fluctuations in retail sales for a product *can create excess inventory* for distributors, manufacturers, and suppliers.



# Supply Chain Management (SCM)

Supply chain management is the **close linkage of activities** involved in the processes of *buying, making* and *moving* a product.

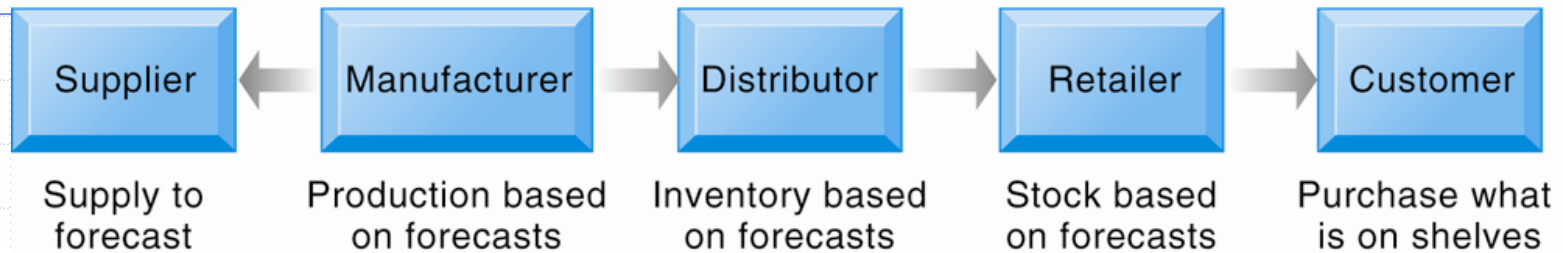
Supply chain management is important to a business because through its **efficiency** it can **coordinate, schedule, and control the delivery of products** and **services to customers**.

## Goal:

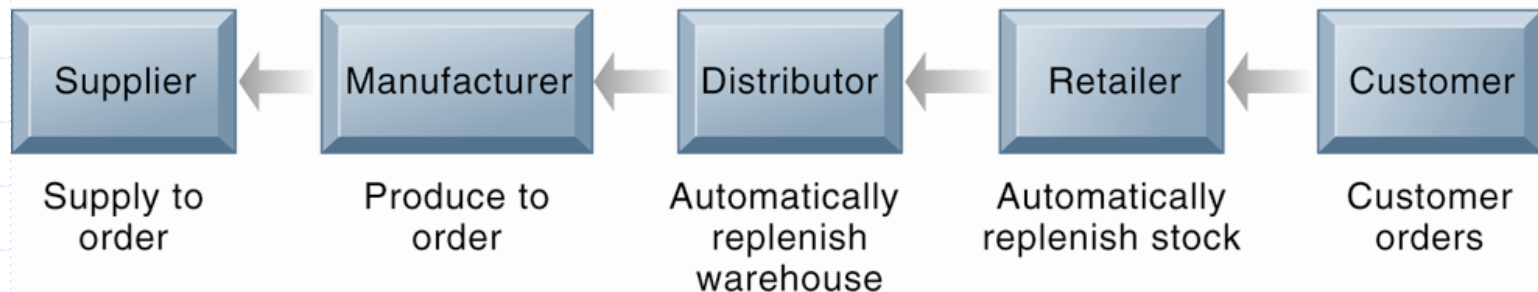
**Right amount** of products to destination with **least** amount of **time** and **lowest** cost

# Push- Versus Pull-Based Supply Chain Models

## Push-Based Model



## Pull-Based Model



The difference between **push-** and **pull-**based models is summarized by the slogan “***Make what we sell, not sell what we make.***”

# Watch this video

- ◆ <https://www.youtube.com/watch?v=YlagOFNqYmA>
- ◆ <https://www.youtube.com/watch?v=8kOA8nCGif0>
- ◆ <https://www.youtube.com/watch?v=W4VLBw1kJWI>
- ◆ <https://www.youtube.com/watch?v=lZPO5RclZEo>
- ◆ [https://www.youtube.com/watch?v=DvEh04LNJ\\_I](https://www.youtube.com/watch?v=DvEh04LNJ_I)



# **Customer Relationship Management (CRM)**

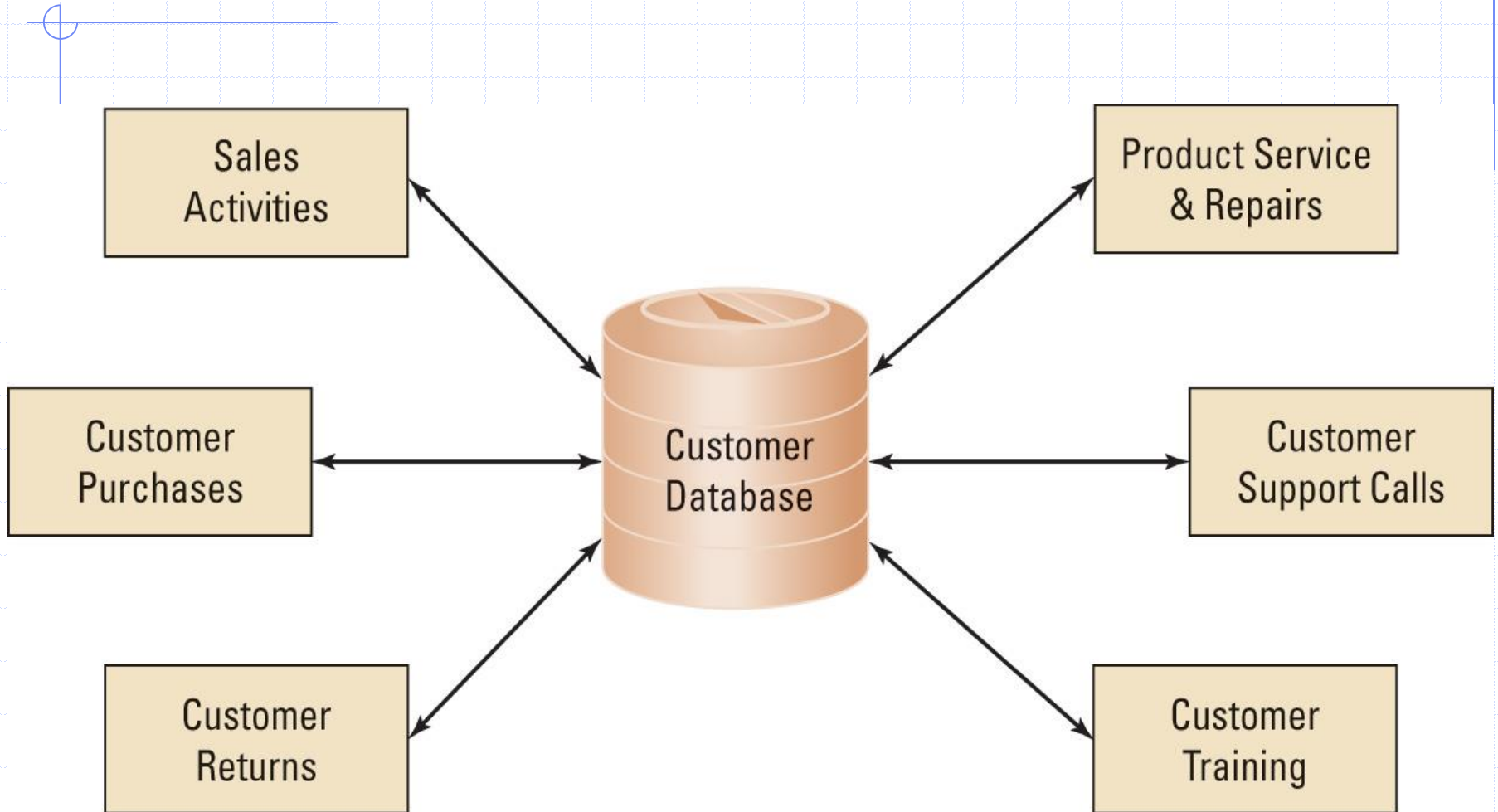
# Customer relationship management (CRM) systems

- Provide information to *coordinate all of the business processes that deal with customers*
  - ◆ Sales
  - ◆ Marketing
  - ◆ Customer service
- Helps firms *identify, attract, and retain* most profitable customers
- Organizations can find their most valuable customers through “**RFM**” - **R**ecency, **F**requency, and **M**onetary value
  - How recently* a customer purchased items
  - How frequently* a customer purchased items
  - The monetary value* of each customer purchase

# A comprehensive CRM system comprises three primary components:

- ◆ **Operational CRM** —includes systems for automating the fundamental business processes like marketing, sales, and support for interacting with the customer.
- ◆ **Analytical CRM** —includes systems for analyzing customer behavior and perceptions (e.g., quality, price, and overall satisfaction) in order to provide business intelligence.
- ◆ **Collaborative CRM** —includes systems for providing effective and efficient communication with the customer from the entire organization.

# An Example Customer Relationship Management (CRM) System



# Short Video- CRM

<https://www.youtube.com/watch?v=kwf-TSpDoyA>

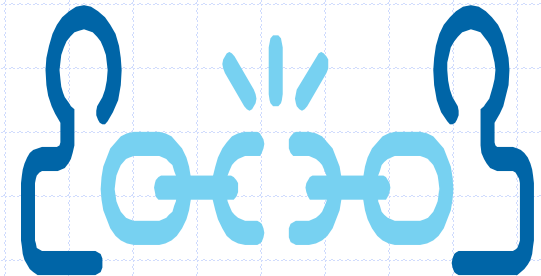
[https://www.youtube.com/watch?v=mbo8\\_VHaBWw](https://www.youtube.com/watch?v=mbo8_VHaBWw)

The background is a light blue grid. There are several blue lines: a vertical line on the left, a horizontal line near the top, and another horizontal line near the bottom. There are also blue corner ornaments: a small circle at the top-left intersection of the first vertical and horizontal lines, and a larger circle at the bottom-right intersection of the second vertical and horizontal lines.

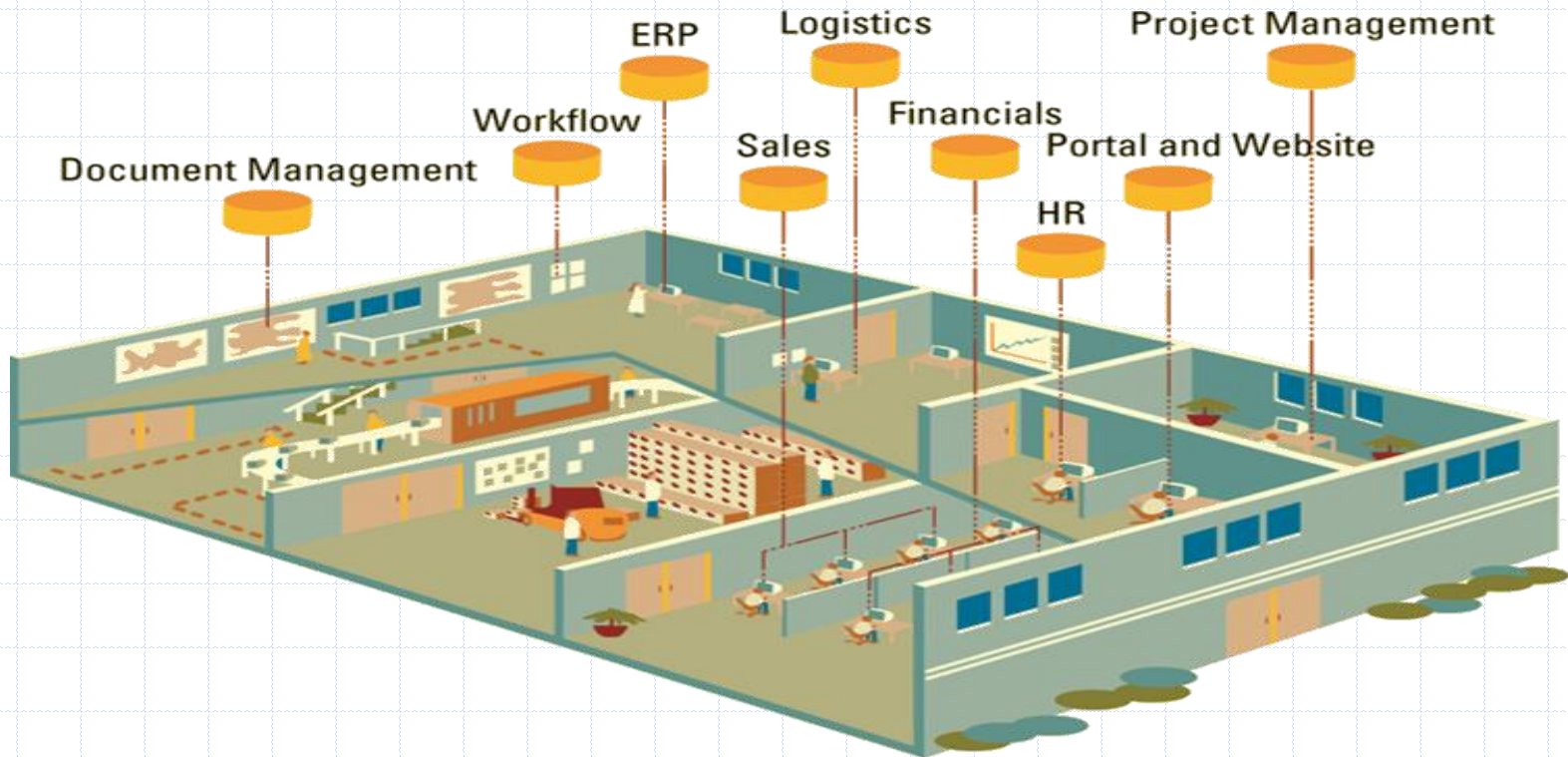
# Enterprise Resource Planning

# Enterprise Resource Planning

- ◆ **ERP** *Integrates all departments and functions throughout an organization into **a single system** (or integrated set of systems)* so that employees can make *enterprise wide decisions* by viewing enterprise wide information on all business operations



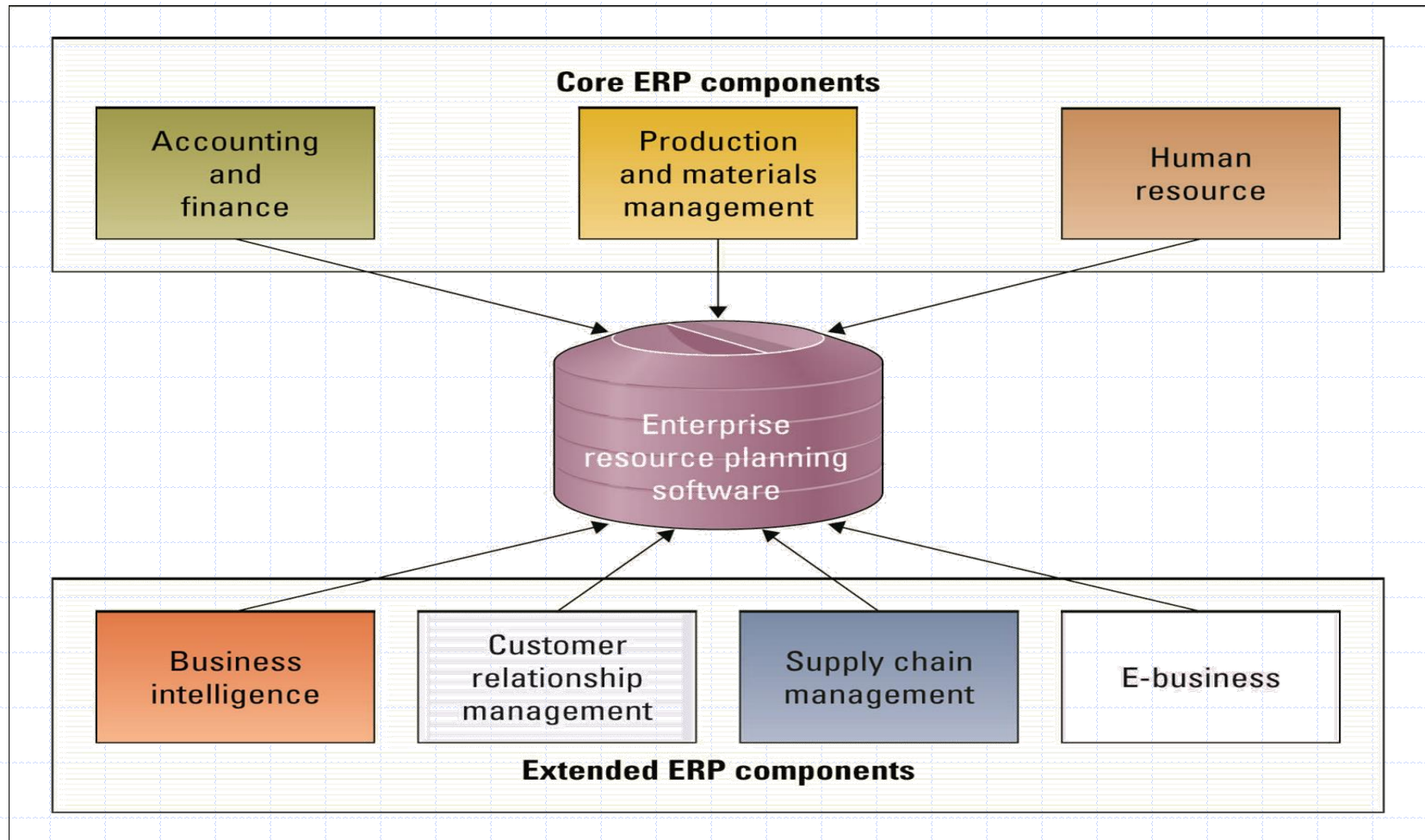
# The Organization Before ERP



# ERP Bringing The Organization Together



# The Extended ERP



# Watch this video

- ◆ <https://www.youtube.com/watch?v=IoVSNFhpha0>
- ◆ <https://www.youtube.com/watch?v=wYb2jrYWmgw>
- ◆ <https://www.youtube.com/watch?v=uwjHmKu8o1M>

# Task



◆ Read chapter 9 of textbook

# Resources & Recommended Readings

- ◆ Baltzan, P. ( 2016) *Business Driven Information Systems*. Global Edition, 5<sup>th</sup> ed McGraw-Hill/NY. ISBN 978-1-259-25176-4
- ◆ Laudon K.C. and Laudon J.P. (2016) *Management Information Systems, Global Edition, 14th ed*. Prentice Hall (*or previous editions*)
- ◆ Post G. (2005) *Management Information Systems*, McGraw-Hill/Irwin. ISBN-13 9780072947793.