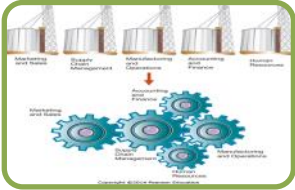


# Chapter 7 - Enhancing Business Processes Using Enterprise Information Systems

Enterprise systems integrate business activities across the organization and with business partners

# Chapter 7 Learning Objectives



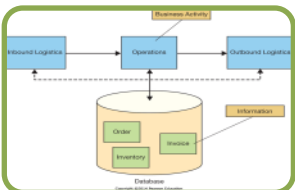
## Core Business Processes and Organizational Value Chains

- Explain core business processes that are common in organizations.



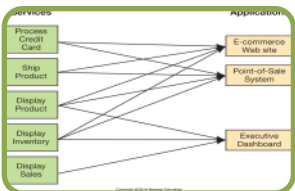
## Enterprise Systems

- Describe what enterprise systems are and how they have evolved.



## Enterprise Resource Planning

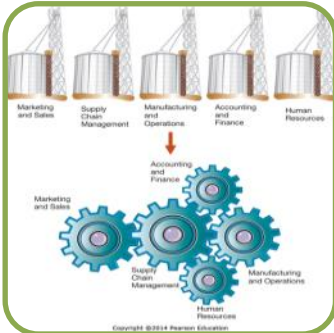
- Describe enterprise resource planning systems and how they help to improve internal business processes.



## The Formula for Enterprise System Success

- Understand and utilize the keys to successfully implementing enterprise systems.

# Core Business Processes and Organizational Value Chains



## Core Business Processes and Organizational Value Chains

Explain core business processes that are common in organizations.



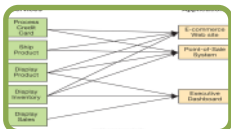
### Enterprise Systems

Describe what enterprise systems are and how they have evolved.



### Enterprise Resource Planning

Describe enterprise resource planning systems and how they help to improve internal business processes.



### The Formula for Enterprise System Success

Understand and utilize the keys to successfully implementing enterprise systems.

# Scenario

- You work for a mid-sized manufacturer of supplies for white boards.
- Working in groups of 3...each of you will take responsibility for:
  - Inbound Logistics/Procurement
  - Operations/Manufacturing
  - Outbound logistics/Order Fulfillment
- What information do you need to make your team efficient and effective?

## Scenario (cont.)

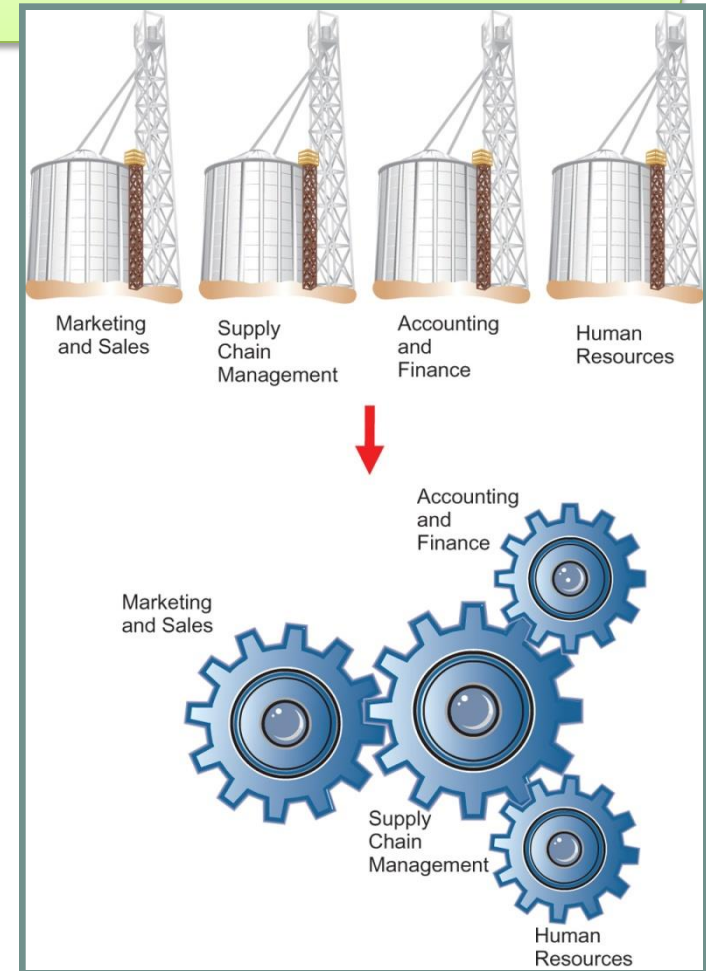
- What types of information needs to flow from one team to the next to make the organization efficient and effective?
- How do we facilitate this flow of information from one system to the next?

## Scenario (cont.)

- What type of information flows between teams within your organization & what type of information flows between your organization and your business partners (suppliers & customers)?

# Core Business Processes

- Traditional business functions:
  - Marketing and sales
  - Supply chain management
  - Accounting and finance
  - Human resources
- Not distinct independent silos, but instead highly interrelated
- Business processes cross boundaries of business functions.



Break the class up into 4 groups



Marketing  
and Sales



Supply  
Chain  
Management



Accounting  
and  
Finance

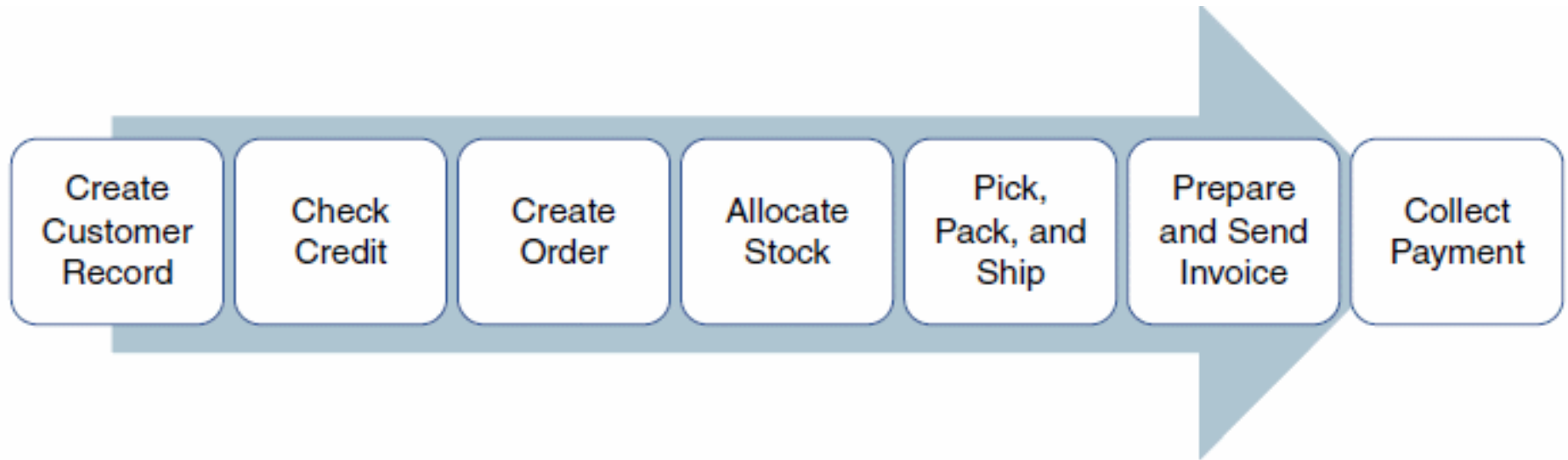


Human  
Resources



# Order-to-Cash Process

- The processes associated with selling a product or service



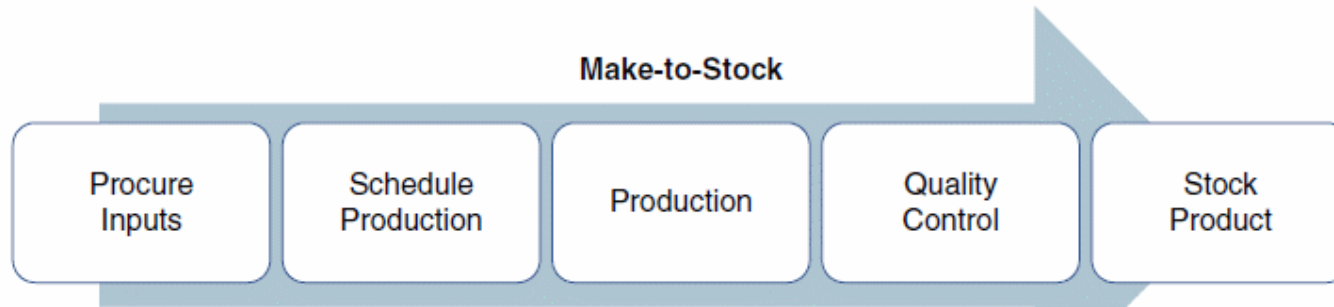
# Procure-to-Pay Process

- The processes associated with procuring goods from external vendors

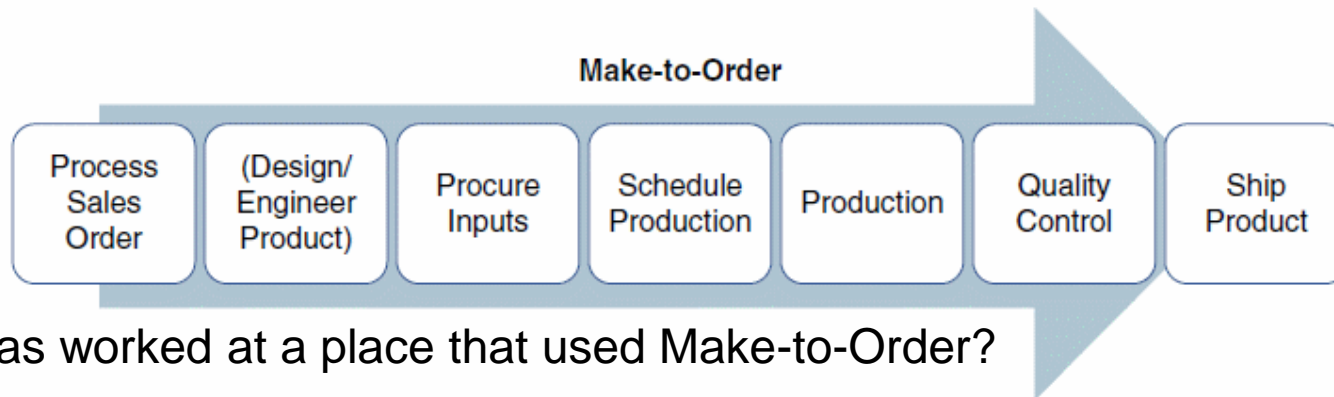


# Make-to-Stock / Make-to-Order Process

- The processes associated with producing goods



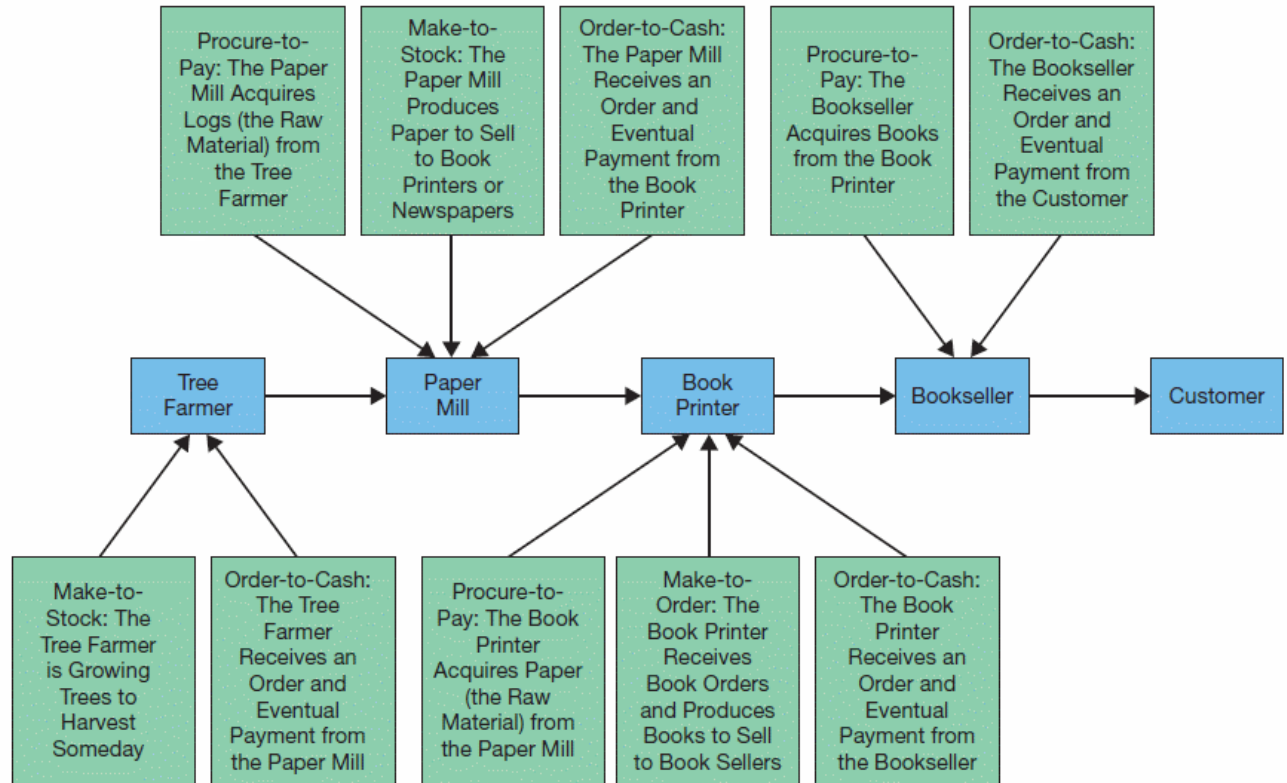
Who has worked at a place that used Make-to-Stock?



Who has worked at a place that used Make-to-Order?

# Supply Chain

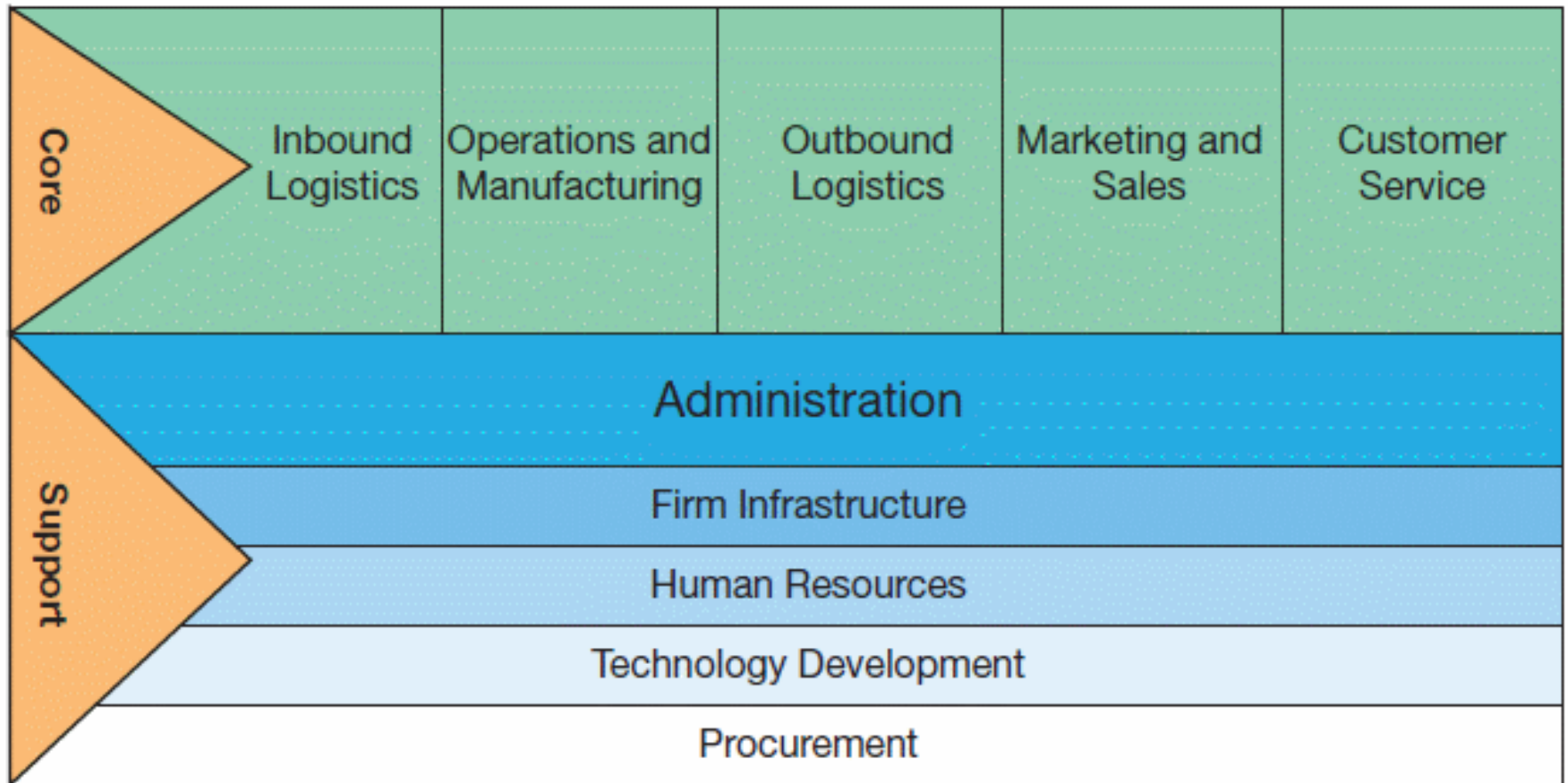
- Core business processes enable the creation of supply chains.
- Resembles a river
  - Start at source
  - Move downstream



# Value Chain

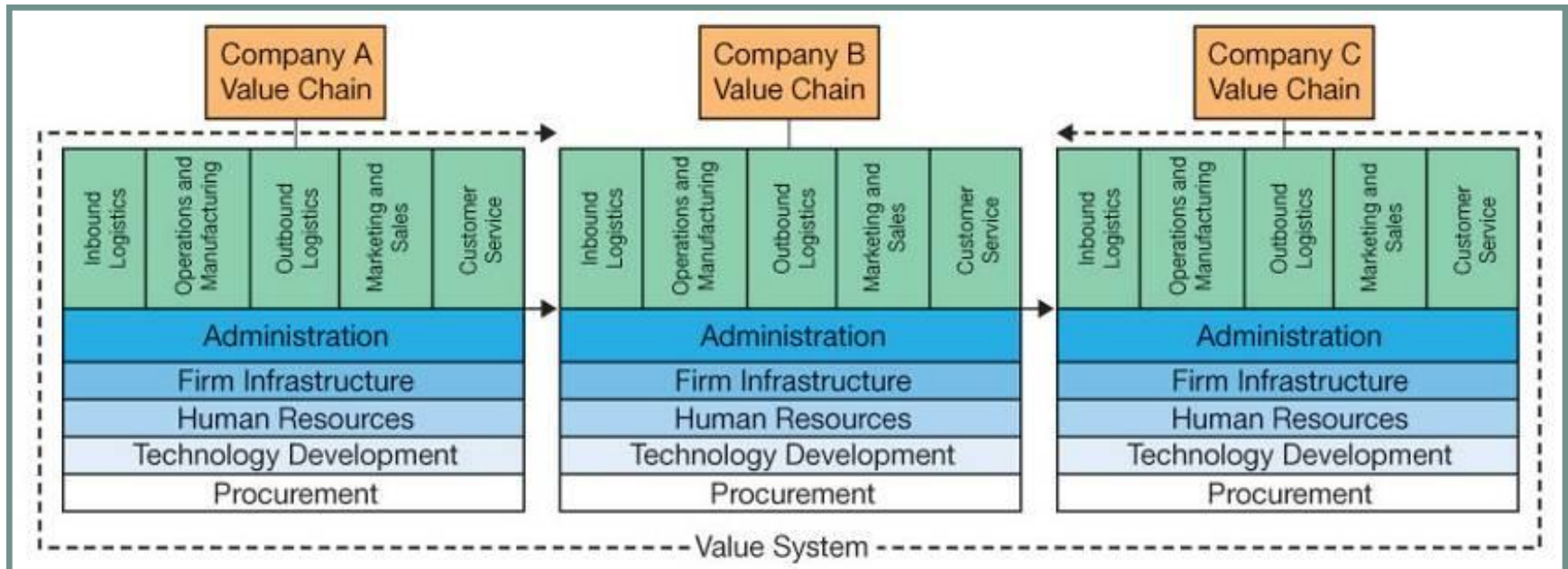
- Value Chain—The set of business activities that add value to the end product.
- Information flows through a set of business activities.
  - Core activities—functional areas that process inputs and produce outputs.
  - Support activities—enable core activities to take place.

# Value Chain Framework

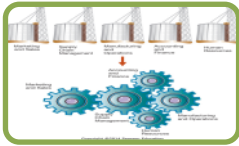


# Externally Focused Applications—Value System

- Coordination of organizational value chains
- Information Flows in a Value System
  - Upstream information flow—information received from another company
  - Downstream information flow—information produced by a company and sent to another organization

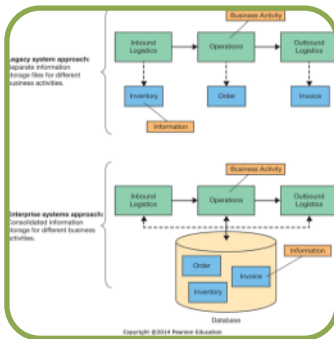


# Enterprise Systems



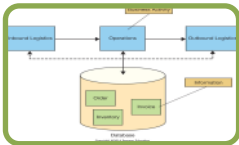
## Core Business Processes and Organizational Value Chains

Explain core business processes that are common in organizations.



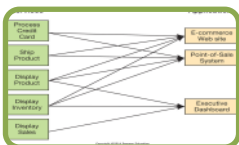
## Enterprise Systems

Describe what enterprise systems are and how they have evolved.



## Enterprise Resource Planning

Describe enterprise resource planning systems and how they help to improve internal business processes.



## The Formula for Enterprise System Success

Understand and utilize the keys to successfully implementing enterprise systems.



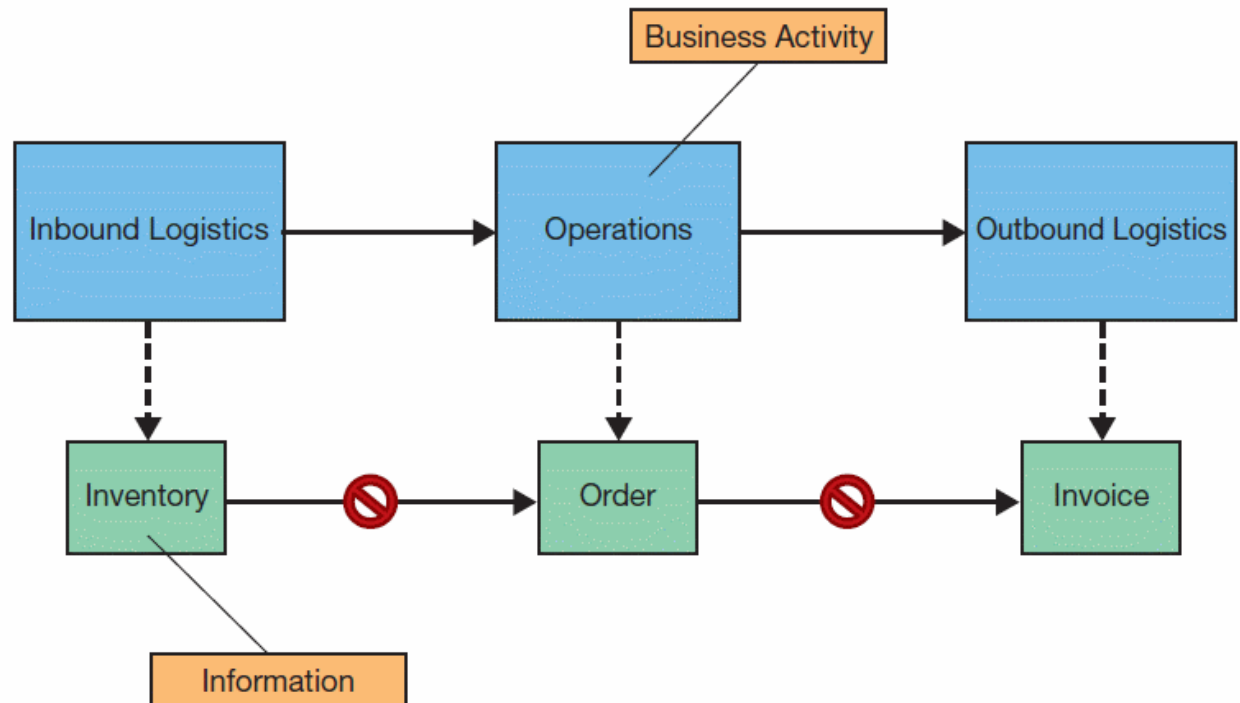
# The Rise of Enterprise Systems

- Stand-alone applications
  - Not designed to communicate with other system
  - Variety of computing hardware platforms
  - Enable departments to conduct daily business activities
  - Not helpful for other areas in the firm
- Proprietary systems
  - From vendors
  - Not designed to share with other vendors' systems
  - Problem of knitting together (hodgepodge portfolio of discordant proprietary applications)
  - Lack of integration

# Legacy Systems

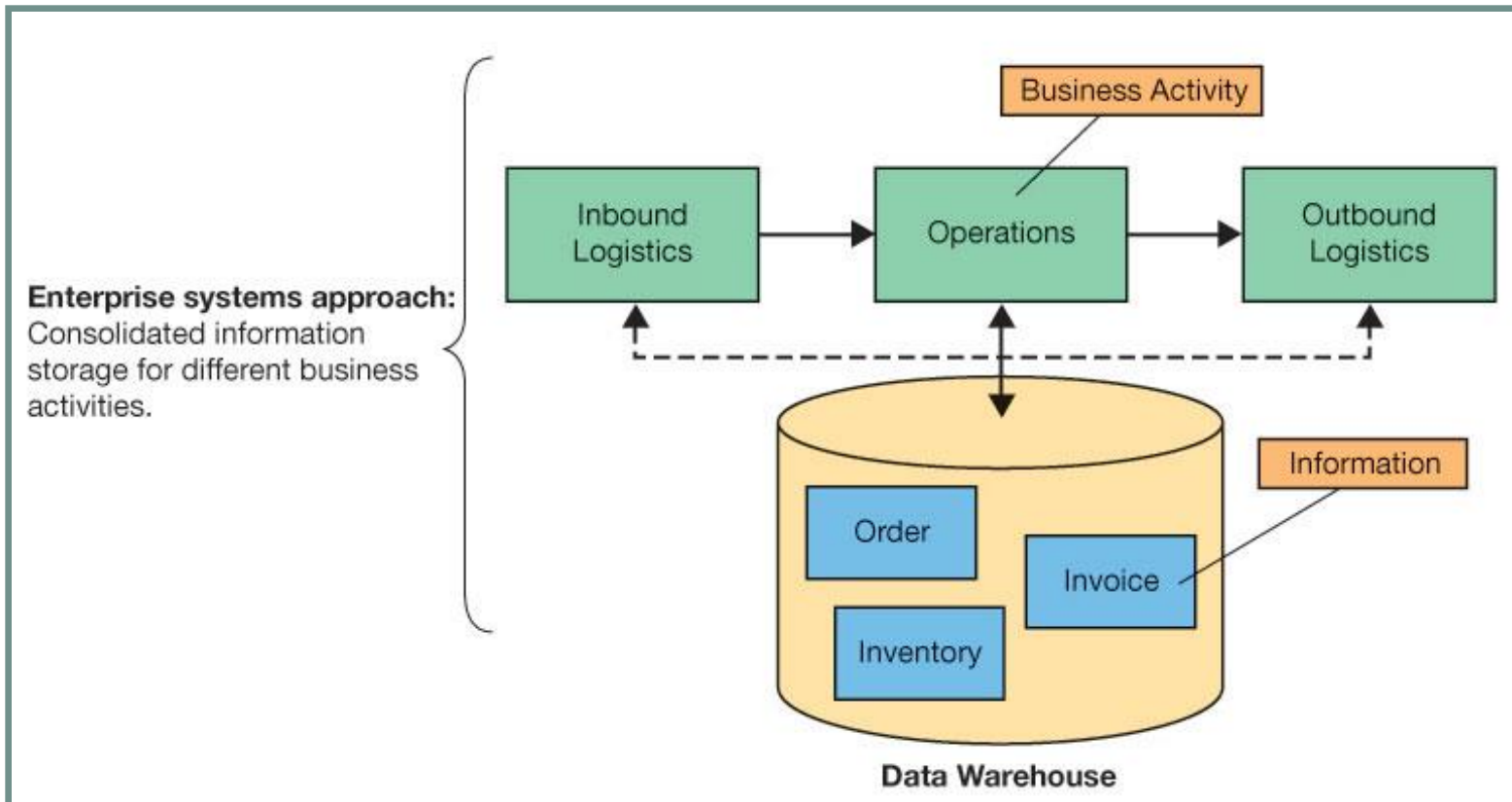
- Each department has its own system.

- Infrastructure specific
- Inefficient processes
- Potential for inaccuracies
- Too many “rocks in the river”



# Enterprise System Approach

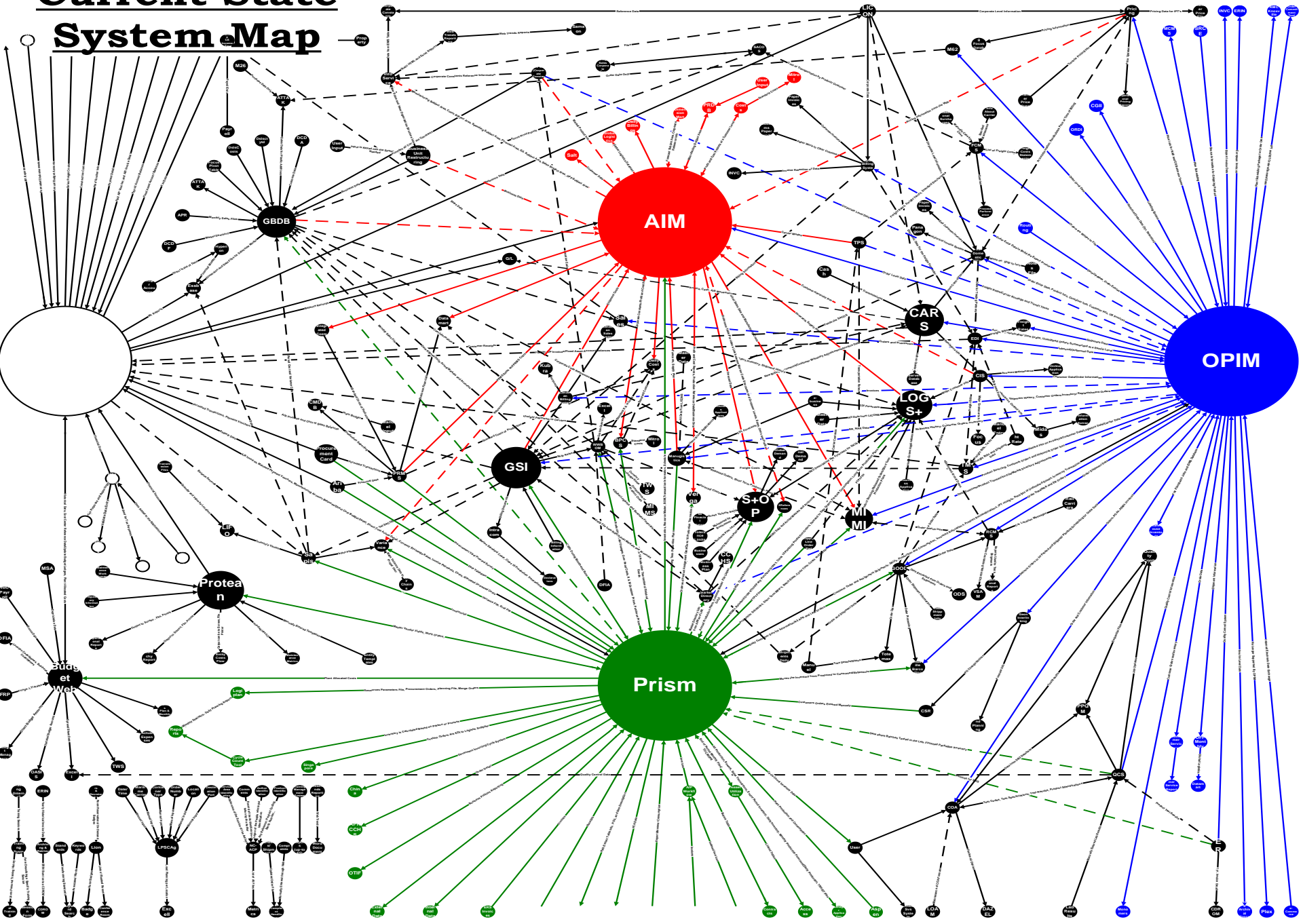
- Integrated suite of business applications for virtually every department, process, and industry



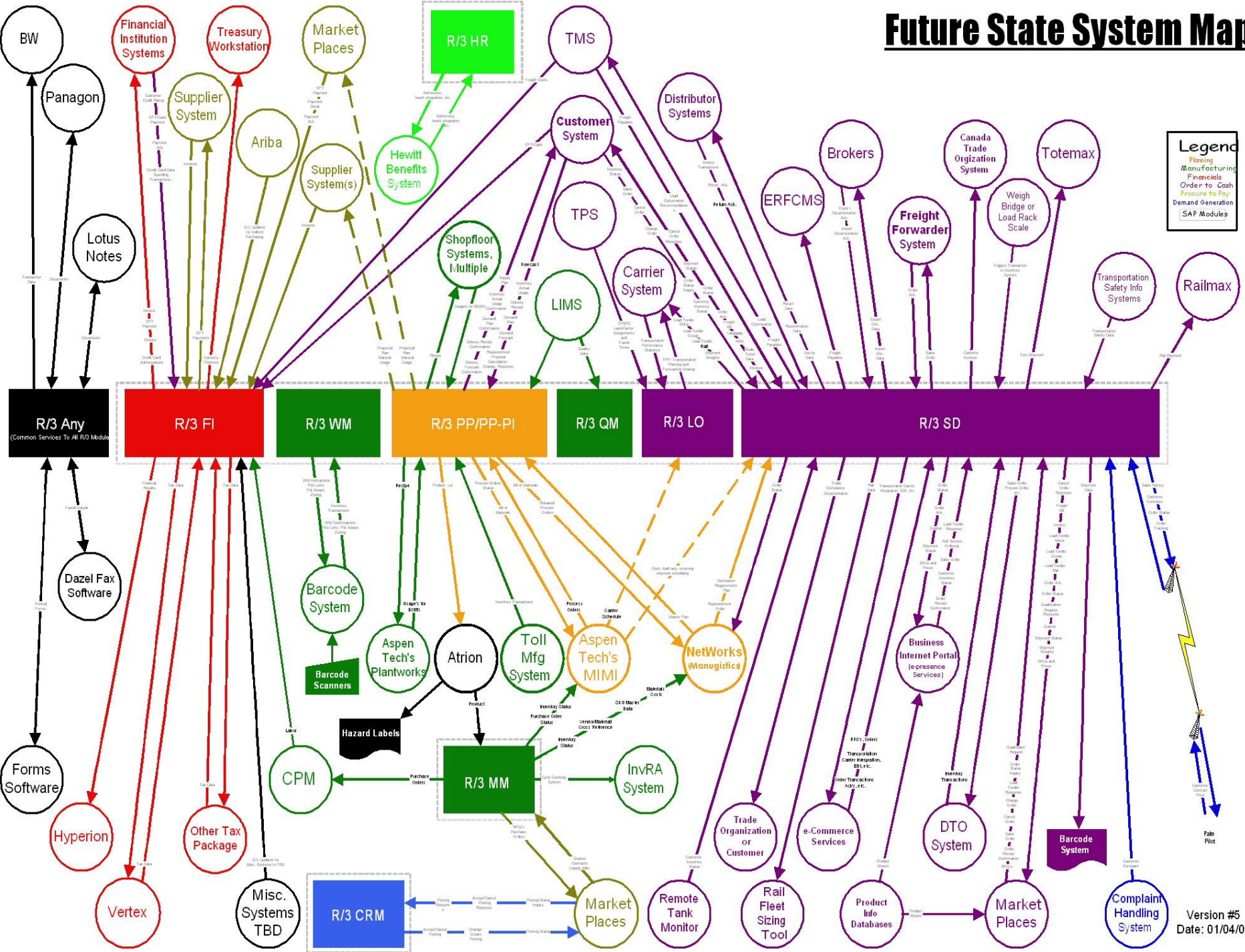
# ERP Challenges

- What are some of the challenges with implementing an ERP?
- Why would a company want to do this?
- Who might resist? Why?

# Current State System Map



# Future State System Map



**Legend**

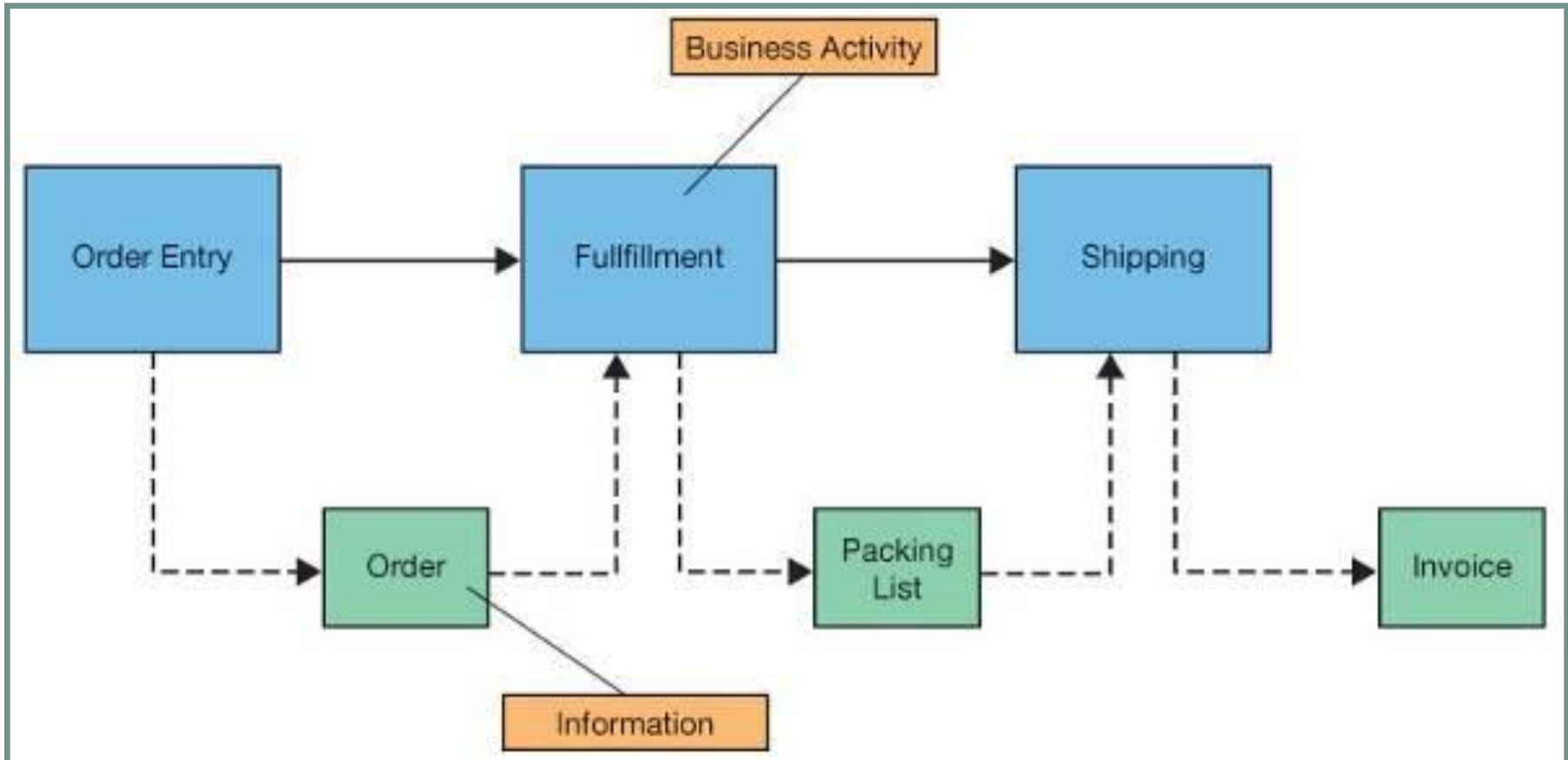
- Planning
- Manufacturing
- Financials
- Order to Cash
- Procure to Pay
- Demand Generation
- SAP Modules

# Enterprise Resource Planning

- Who are the largest and most influential ERP vendors?

# Supporting Business Processes

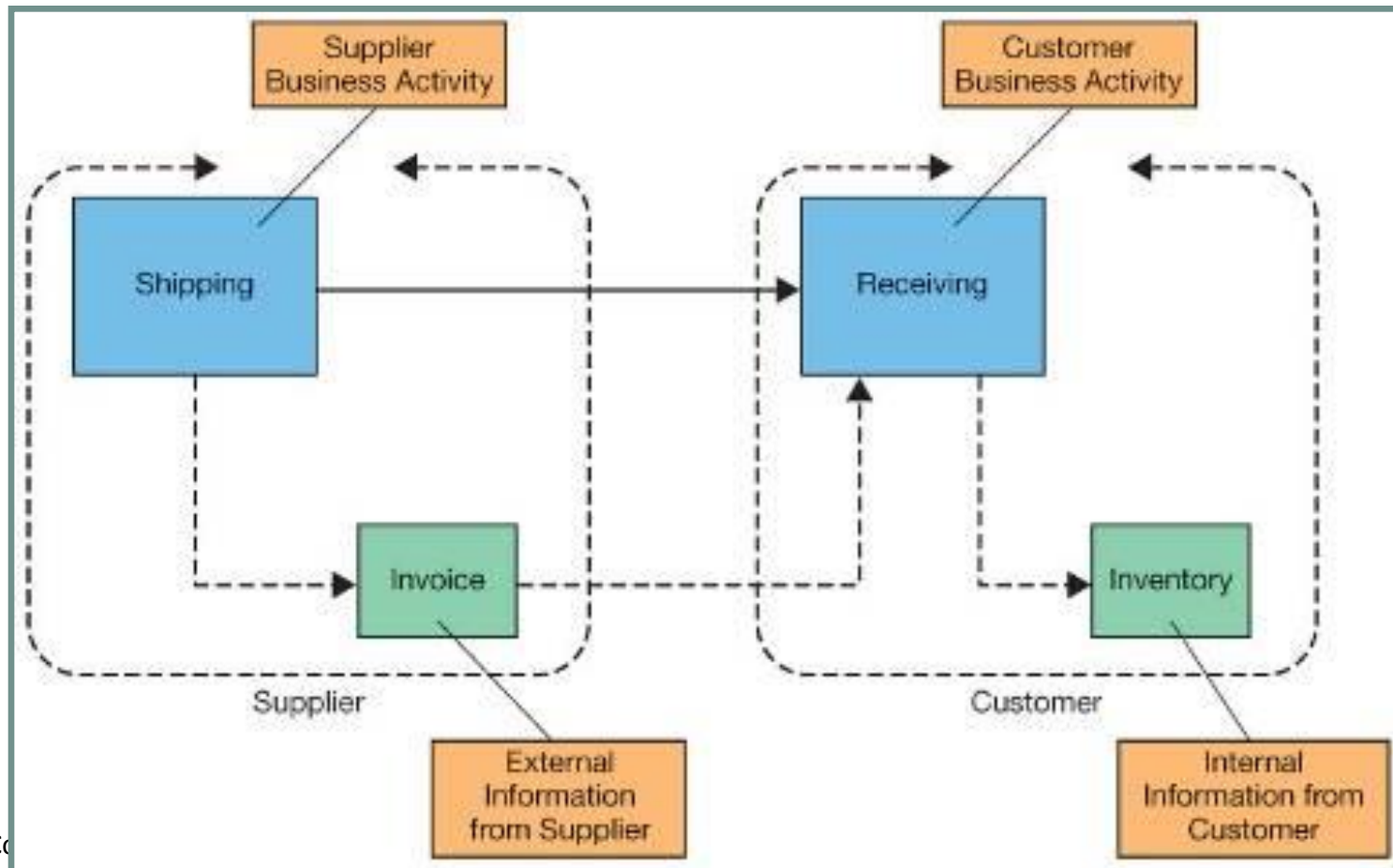
- Internally focused systems





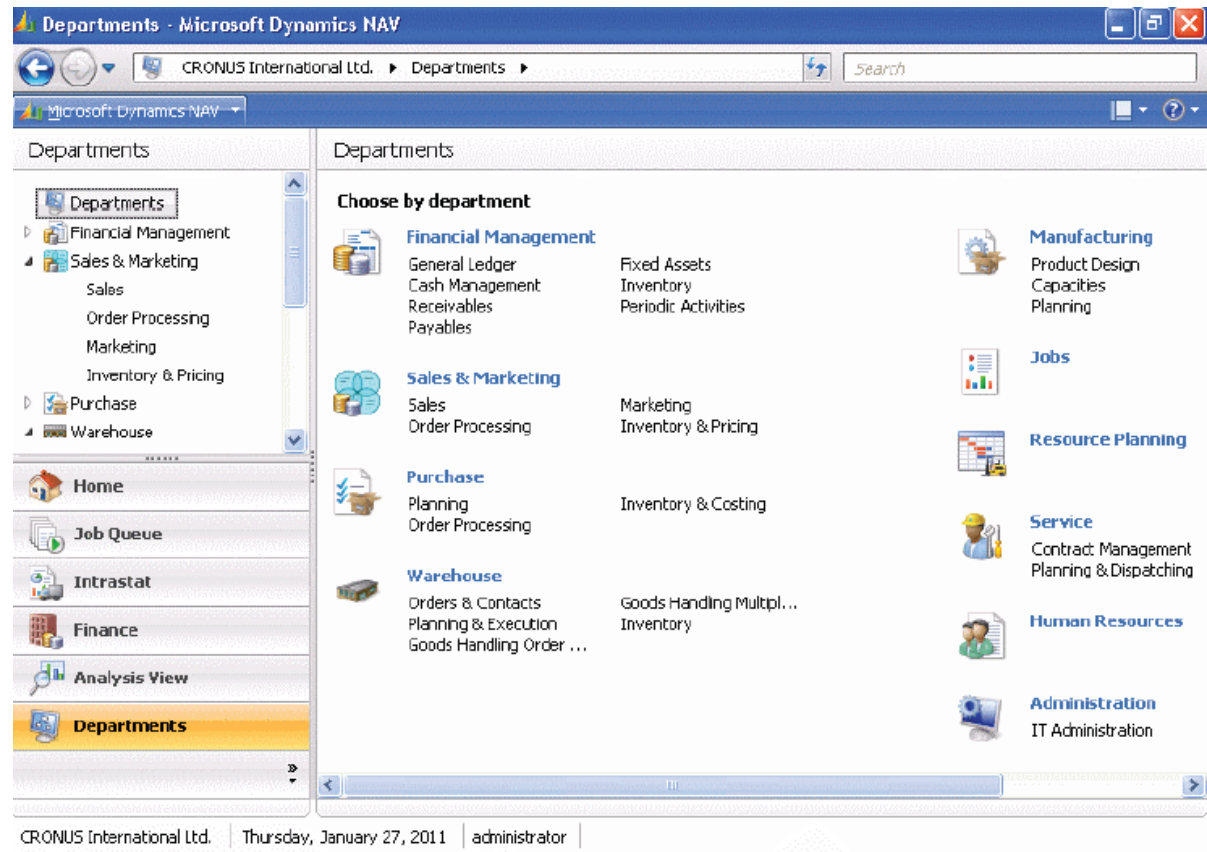
# Supporting Business Processes

- Externally focused systems (interorganizational systems)



# Modules of Enterprise Systems

- Each module in an enterprise system replaces a stand-alone legacy system.



# Vanilla Versus Customized Software

- **Vanilla version**
  - This version contains features and modules that an enterprise system comes with out of the box.
  - Certain processes might not be supported.
- **Customization**
  - This version contains additional software or changes to vanilla version.
  - It always needs to be updated with new versions of vanilla.

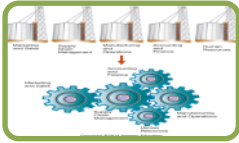
# Capabilities of SAP's ERP System

Capability	Explanation
Financials	Allows organizations to manage corporate finance functions by automating financial supply chain management, financial accounting, and management accounting
Human capital management	Gives organizations the tools needed to maximize the profitability potential of the workforce, with functionality for employee transaction management and employee life cycle management
Operations	Empowers organizations to streamline operations with integrated functionality for managing end-to-end logistics processes while expanding collaborative capabilities in supply chain management, product life cycle management, and supplier relationship management
Corporate services	Allows organizations to optimize centralized and decentralized services for managing real estate, corporate travel, and incentives and commissions

# Best Practices-Based Software

- Most ERP vendors build best practices into their ERP systems.
  - Identify business processes in need of change
  - Future updates are smoother if businesses change their business processes to fit with ERP systems.
- Is following the best practices always the best strategy?
  - If companies have competitive advantage from unique business processes, forcing best practices may actually hurt.

# Enterprise Resource Planning



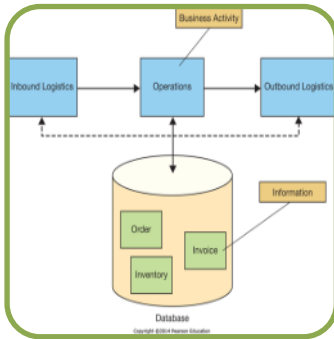
## Core Business Processes and Organizational Value Chains

Explain core business processes that are common in organizations.



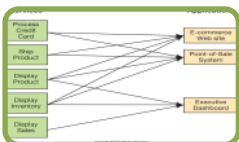
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Describe enterprise resource planning systems and how they help to improve internal business processes.



## The Formula for Enterprise System Success

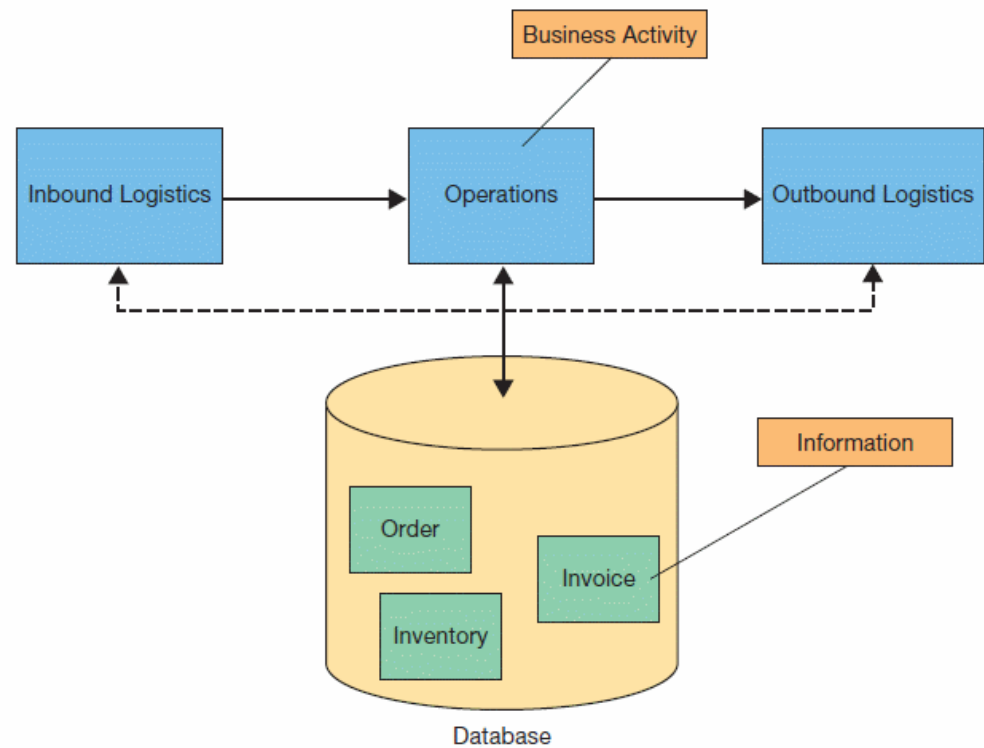
Understand and utilize the keys to successfully implementing enterprise systems.

# Enterprise Resource Planning (ERP) Systems

- Enterprise Resource Planning—Applications that integrate business activities across departmental boundaries.
- ERP evolved during the 1990s from material/manufacturing requirements planning packages.
- Emphasis has since shifted from “resources” and “planning” to “enterprise.”
- Integrate legacy information on a company-wide basis

# Integrating Data to Integrate Applications

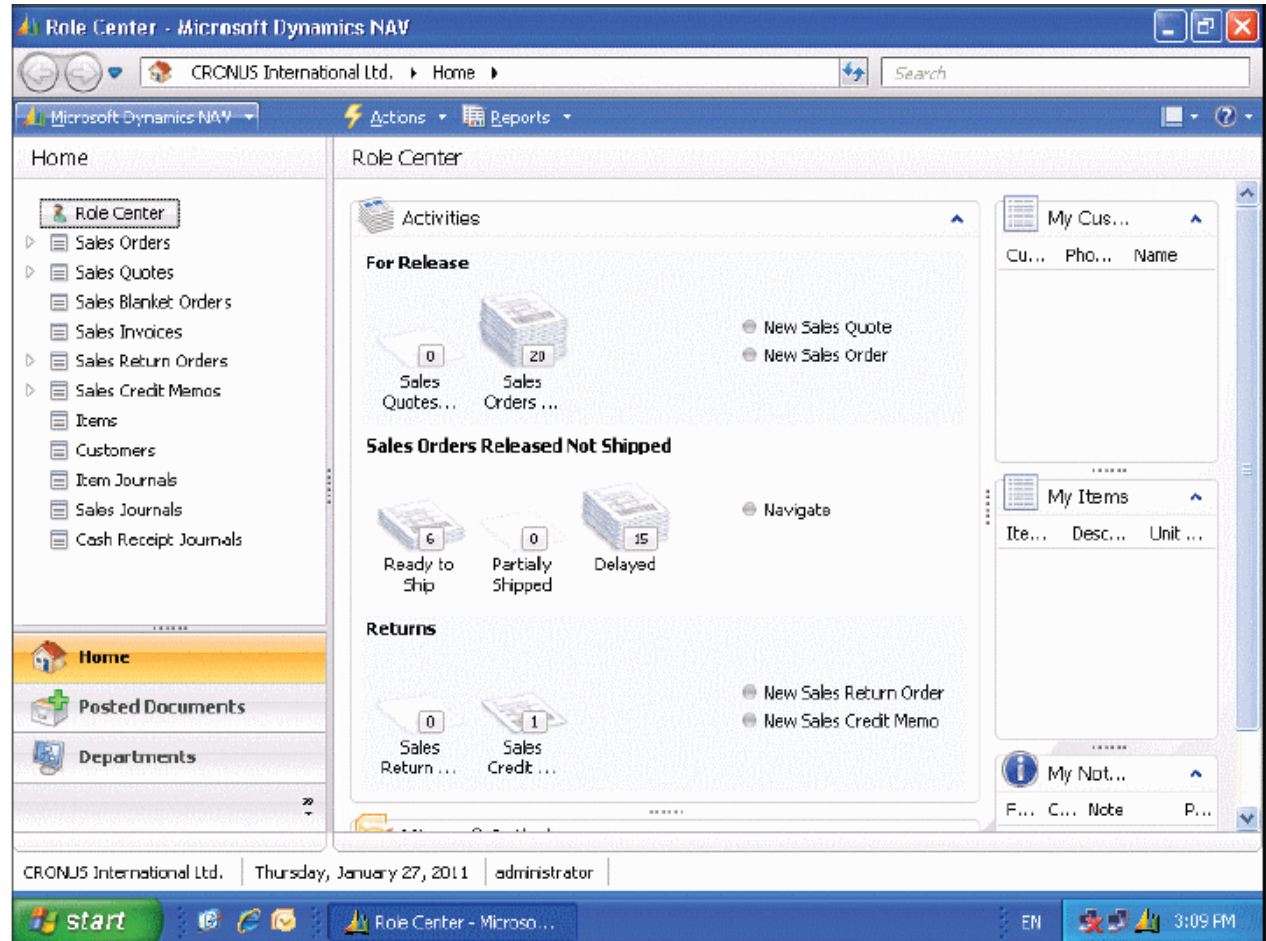
- Central information repository
  - ERP replaces stand-alone applications
  - Modules based on
    - Common database
    - Similar application interfaces





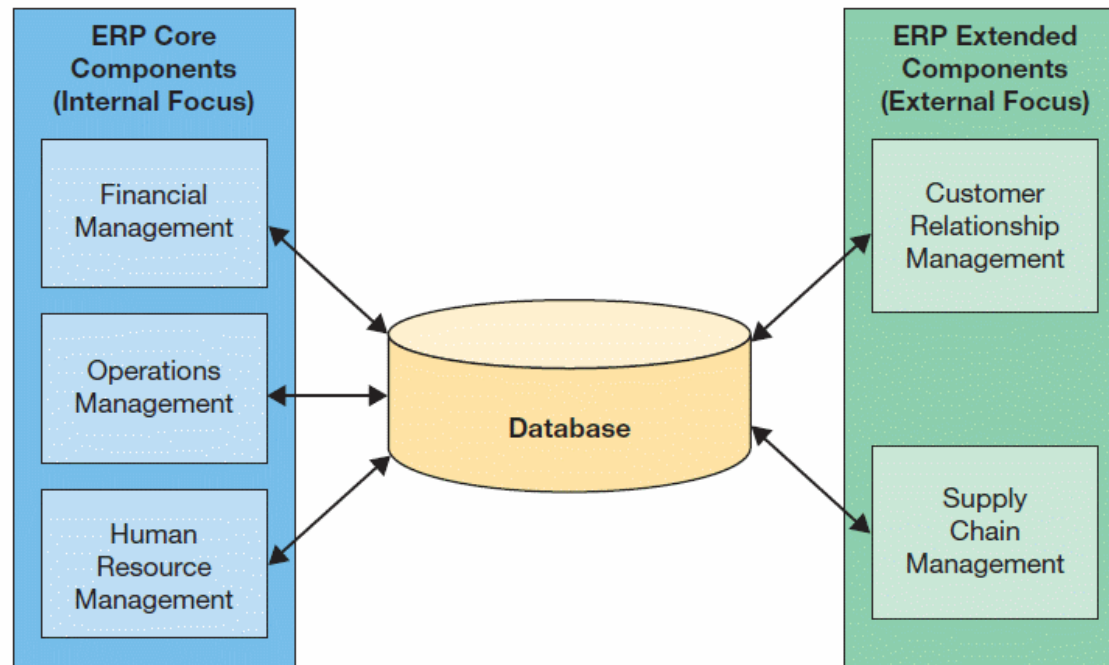
# Example ERP Screen

- An ERP system can provide employees with relevant, up-to-date information.



# Core and Extended ERP Components

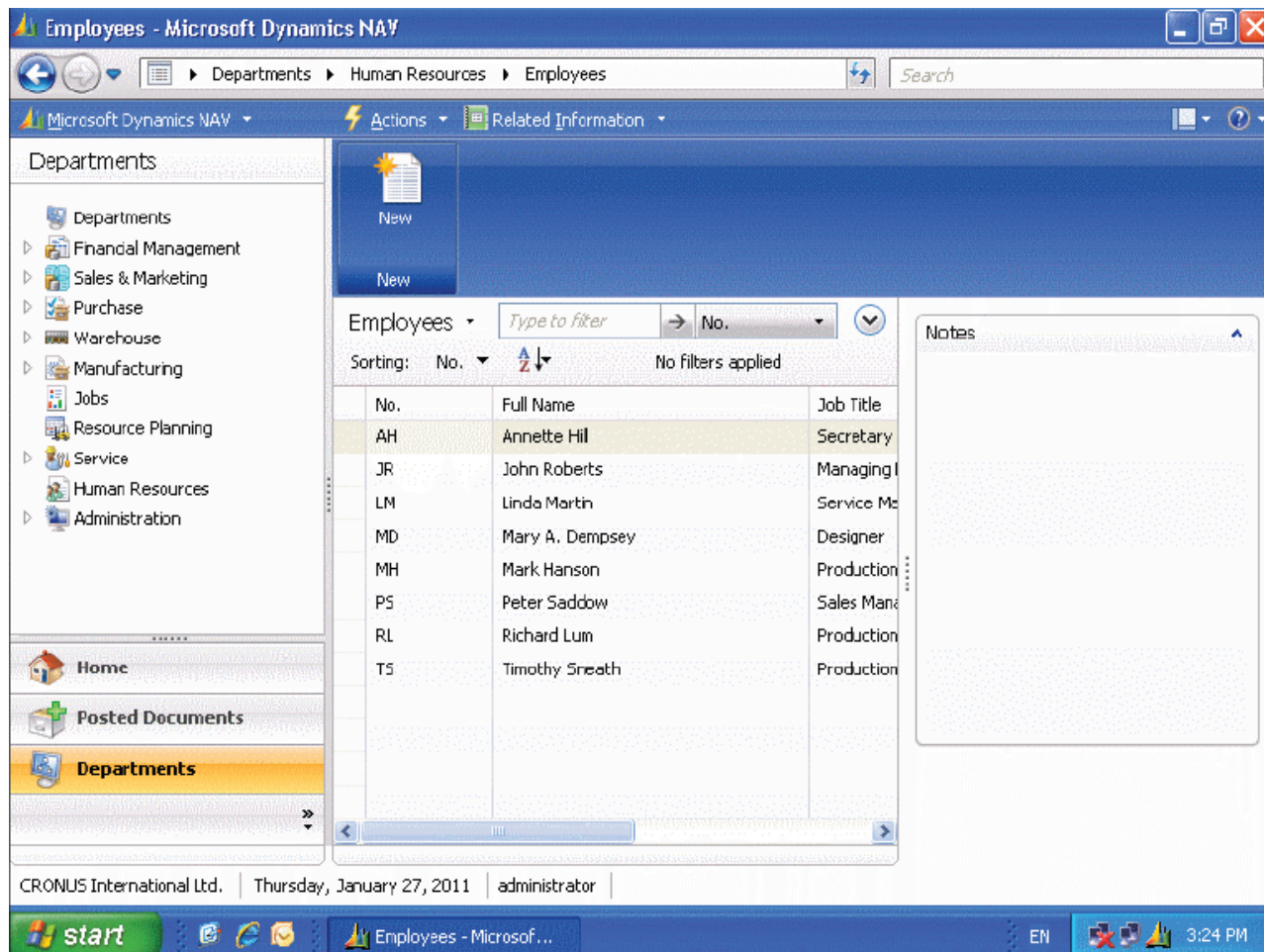
- Core components—support primary internal activities.
- Extended components—support primary external activities.



# ERP Core Components

- Financial Management
  - accounting, financial reporting, performance management, corporate governance
- Operations Management
  - simplify, standardize, and automate business processes for inbound/outbound logistics, product development, manufacturing, sales and service
- Human Resource Management
  - employee recruitment, assignment tracking, performance reviews, payroll, regulatory requirements

# Human Resources Management



The screenshot shows the Microsoft Dynamics NAV interface for the 'Employees' table. The breadcrumb navigation is 'Departments > Human Resources > Employees'. The left-hand navigation pane shows a tree view of departments, with 'Human Resources' selected. The main area displays a list of employees with columns for 'No.', 'Full Name', and 'Job Title'. A 'Notes' pane is visible on the right side of the list.

No.	Full Name	Job Title
AH	Annette Hill	Secretary
JR	John Roberts	Managing I
LM	Linda Martin	Service Mo
MD	Mary A. Dempsey	Designer
MH	Mark Hanson	Production
PS	Peter Saddow	Sales Man
RL	Richard Lum	Production
TS	Timothy Sreath	Production

CRONUS International Ltd. Thursday, January 27, 2011 administrator

# Order-to-Cash

The screenshot displays the Microsoft Dynamics NAV interface for the 'Shipped Not Invoiced' window. The window title is 'Shipped Not Invoiced - Microsoft Dynamics NAV'. The breadcrumb navigation shows 'Home > Sales Orders > Shipped Not Invoiced'. The ribbon includes 'Actions', 'Related Information', and 'Reports'. The 'Home' ribbon has three main sections: 'New' (New), 'Process' (Post, Post and Print, Order Confirmation, Statistics), and 'Report' (Sales Reservation Avail.).

The left-hand pane shows a navigation tree with 'Sales Orders' expanded to 'Shipped Not Invoiced'. Below this are sections for 'Home', 'Posted Documents', and 'Departments'.

The main area displays a table titled 'Sales Orders, Shipped Not Invoiced'. The table has columns for 'No.', 'Sell-to Cust...', and 'Sell-to Customer Name'. Two rows are visible:

No.	Sell-to Cust...	Sell-to Customer Name
101005	30000	John Haddock Insurance Co.
101016	10000	The Cannon Group PLC

On the right side, there are two panels: 'Customer Statistics - ...' and 'Customer Details'. The 'Customer Statistics' panel shows the following data for Customer No. 30000:

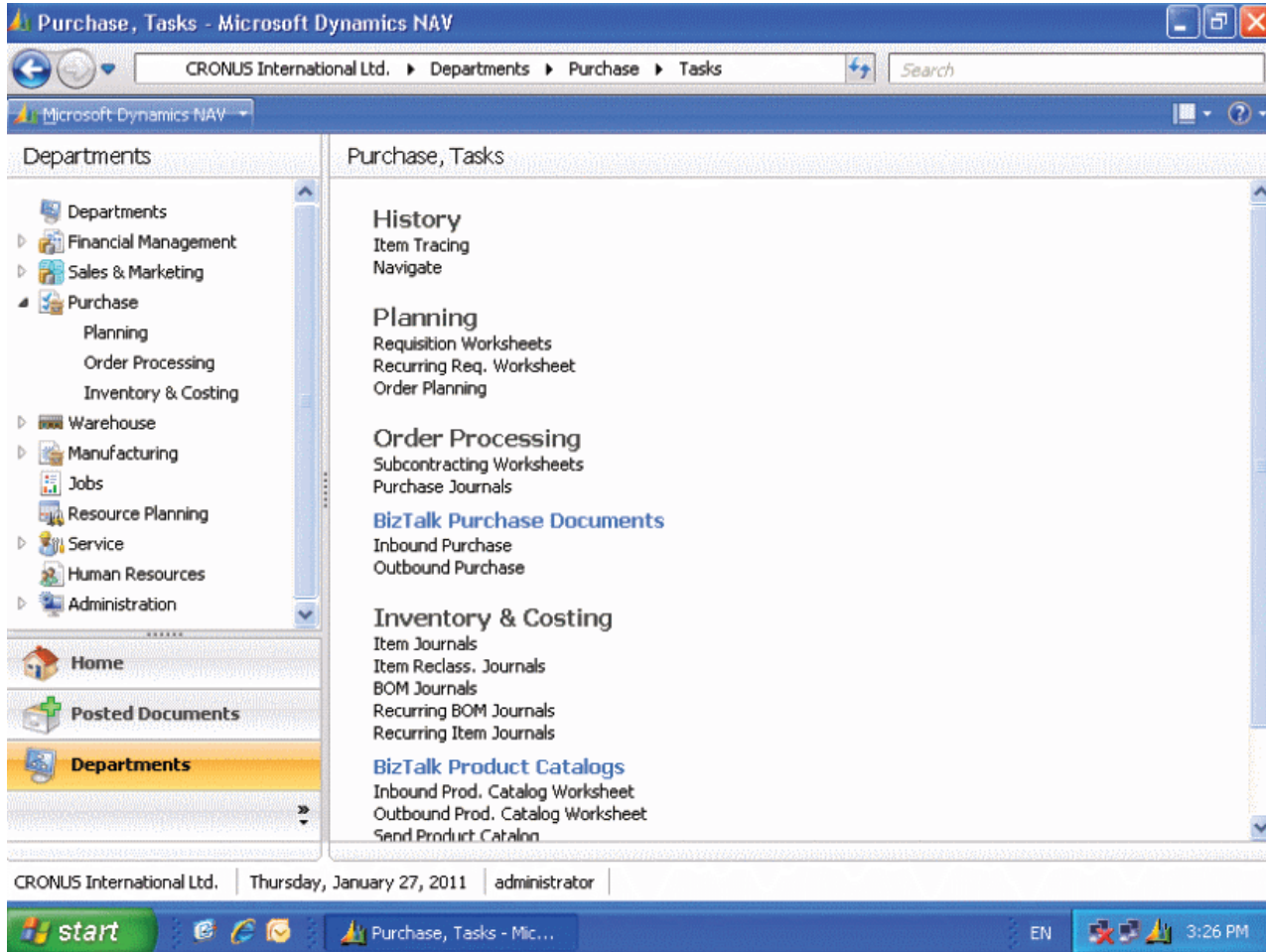
- Balance (LCY): 349,615.40
- Outstanding O...: 9,502.16
- Shipped Not In...: 1,996.90
- Outstanding S...: 10.65
- Shipped Not In...: 1,996.90
- Outstanding In...: 0.00
- Total (LCY): 361,114.46
- Credit Limit (LC...): 0.00
- Overdue Amou...: 110,020.08
- Sales YTD (LCY): 6,142.90

The 'Customer Details' panel shows:

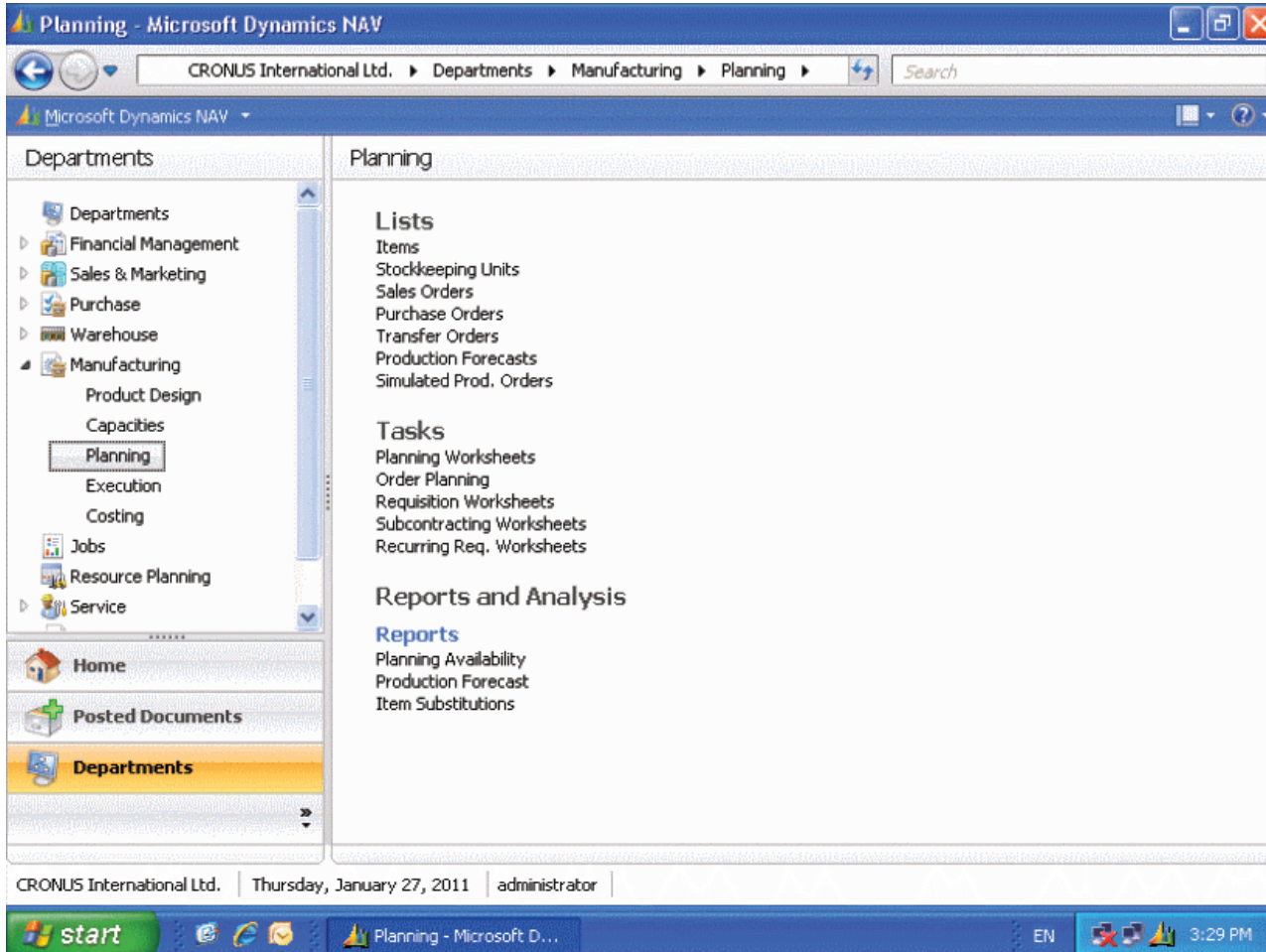
- Customer No.: 30000
- Phone No.:
- E-Mail: john.haddock...
- Fax No.:
- Credit Limit (LC...): 0.00
- Payment Term...: CM

The status bar at the bottom indicates 'CRONUS International Ltd.', 'Thursday, January 27, 2011', 'administrator', and the system clock shows '3:13 PM'.

# Procure-to-Pay



# Production



# ERP Installation

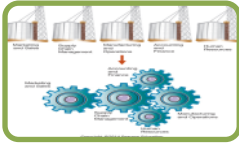
- Configuration of the ERP systems is performed during any ERP implementation.
- System must be configured to reflect business processes and associated business rules.
- Organizations have to make countless decisions on how to configure thousands of database tables to fit the business's needs.
- Organizations hire experienced business analysts or outside consultants to assist with implementation.



# ERP Limitations

- ERP falls short in communicating across organizational boundaries.
- They tend to be not well suited for managing value system activities.
- Other systems can work with ERP to provide these capabilities.

# The Formula for Enterprise System Success



## Core Business Processes and Organizational Value Chains

Explain core business processes that are common in organizations.



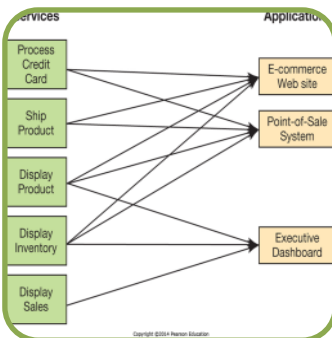
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## Enterprise Resource Planning

Describe enterprise resource planning systems and how they help to improve internal business processes.



## The Formula for Enterprise System Success

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# The Formula for Enterprise System Success

1. Secure executive sponsorship .
  - Most failures are due to lack of top-level management support.
2. Get help from outside experts.
  - Consultants are specifically trained.
  - Implementation tends to happen faster.
3. Thoroughly train users.
  - Training is the most overlooked, underestimated, and poorly budgeted expense.
  - Training can prevent dissatisfaction.
4. Take a multidisciplinary approach to implementations.
  - Include end users from all functional areas in the implementation.
5. Initiate evolving the ERP Architecture.