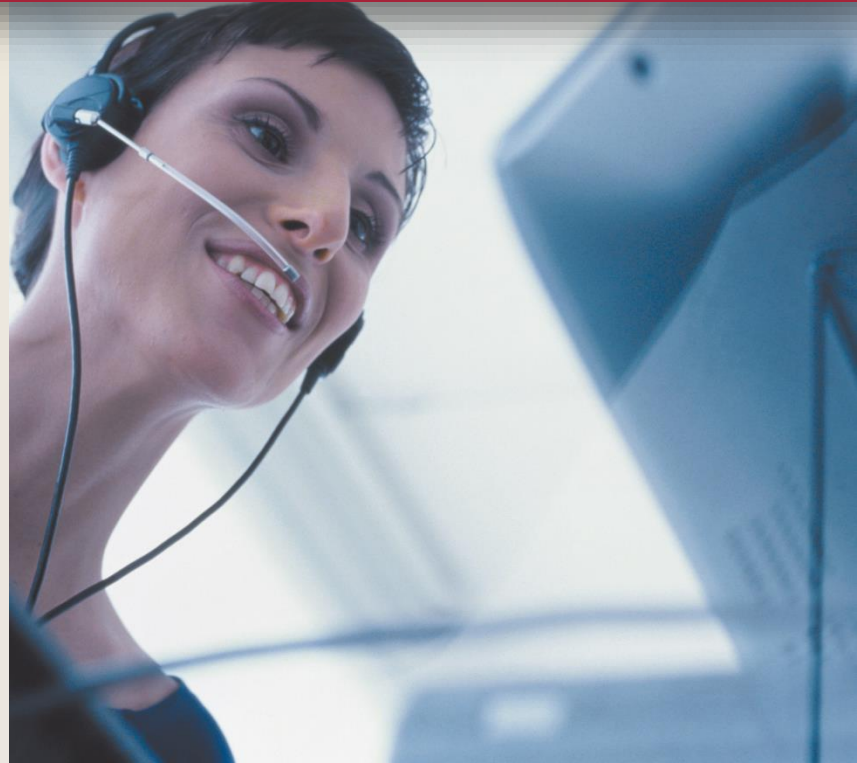


# Enterprise Computing

## Discovering Computers 2012

**Your Interactive Guide  
to the Digital World**



# Content

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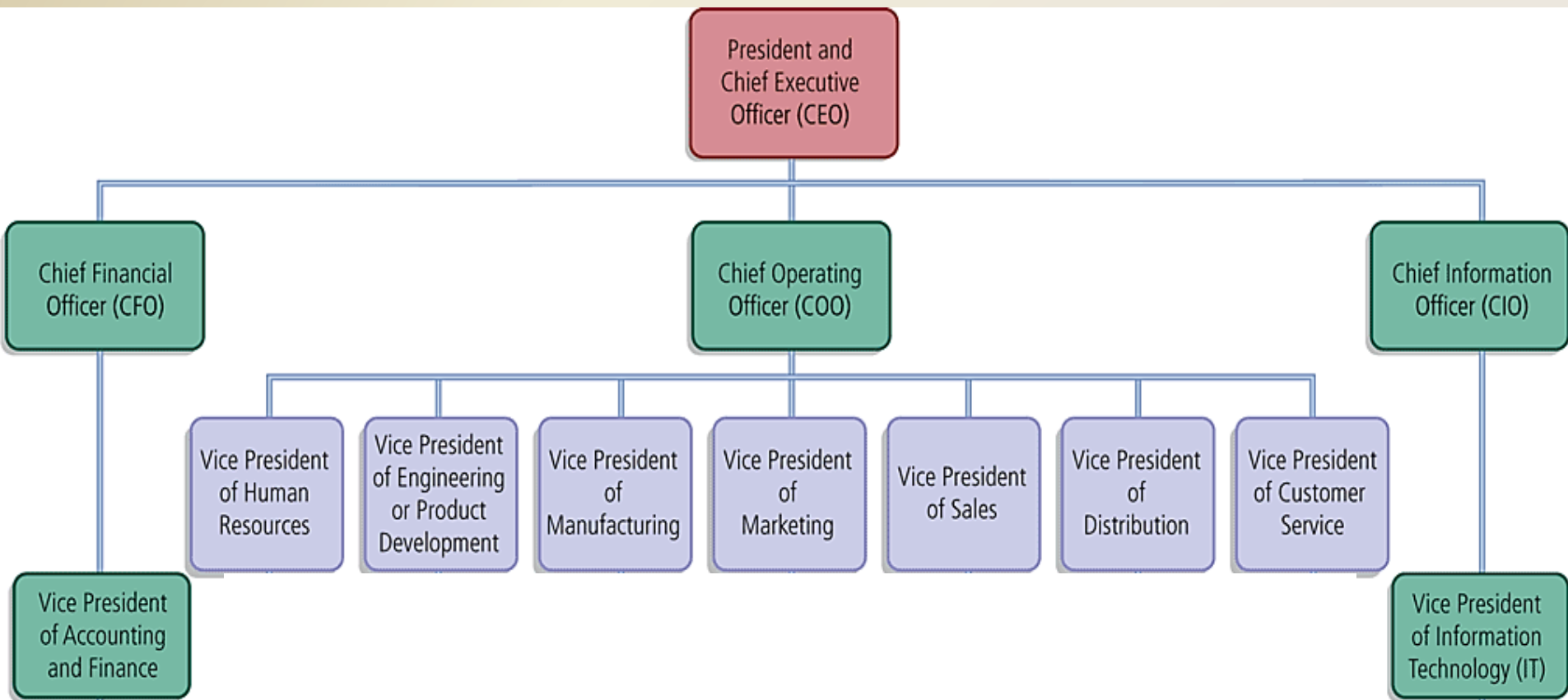
# What Is Enterprise Computing?

Điện toán doanh nghiệp

- **[1] Enterprise computing** refers to the use of computers in networks that encompass variety of operating systems, protocols and network architectures.
- **[2] Enterprise computing** refers to collection of computing and management softwares that are critical to a company's operations.

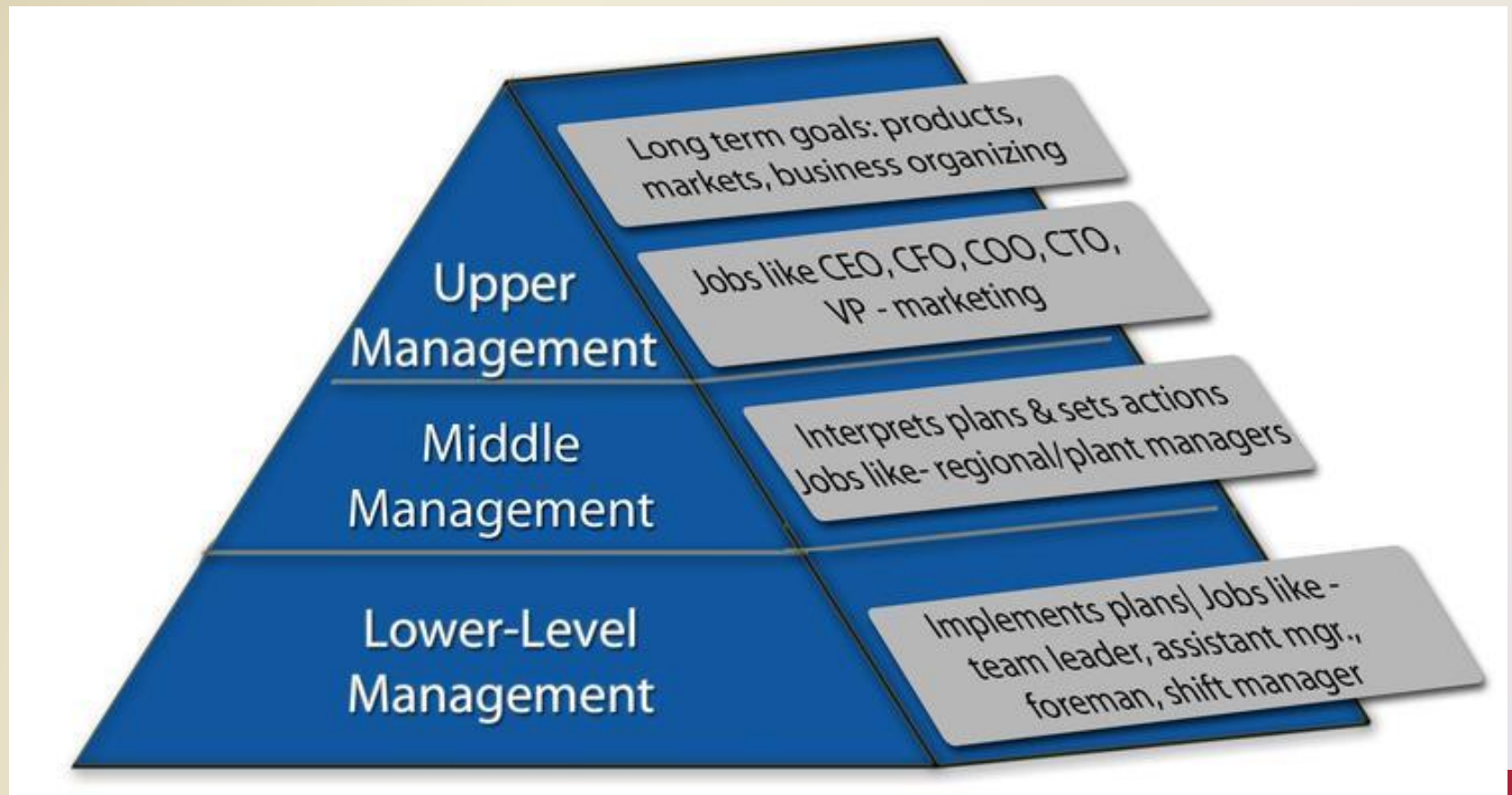
# What Is Enterprise Computing?

- Corporate titles hierarchy



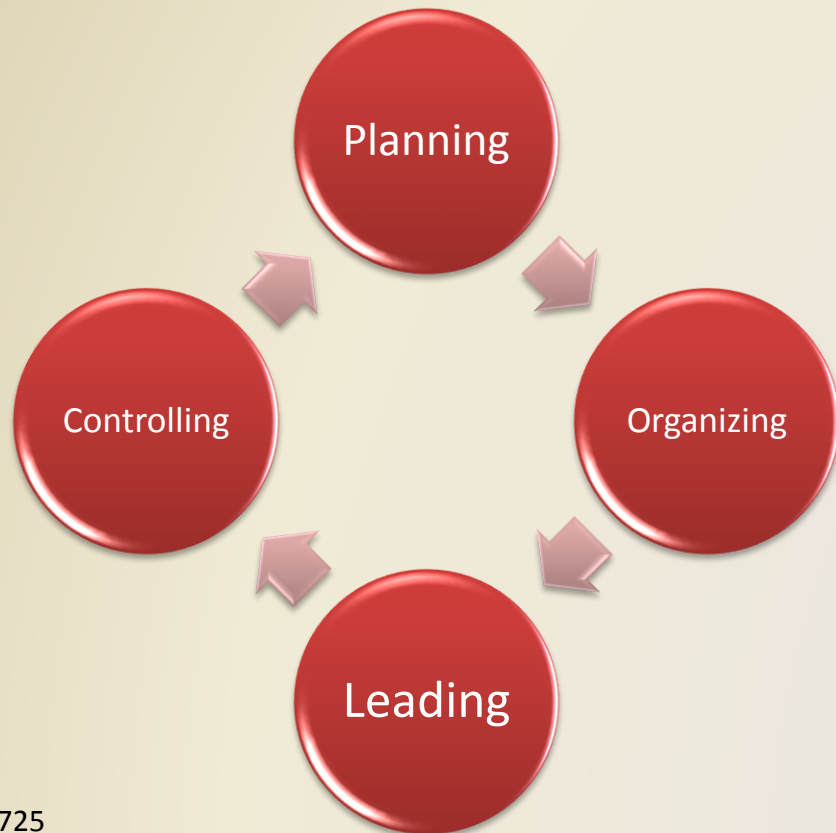
# What Is Enterprise Computing?

- Levels of management in a corporate



# What Is Enterprise Computing?

- **Managers** coordinate resources by performing four activities

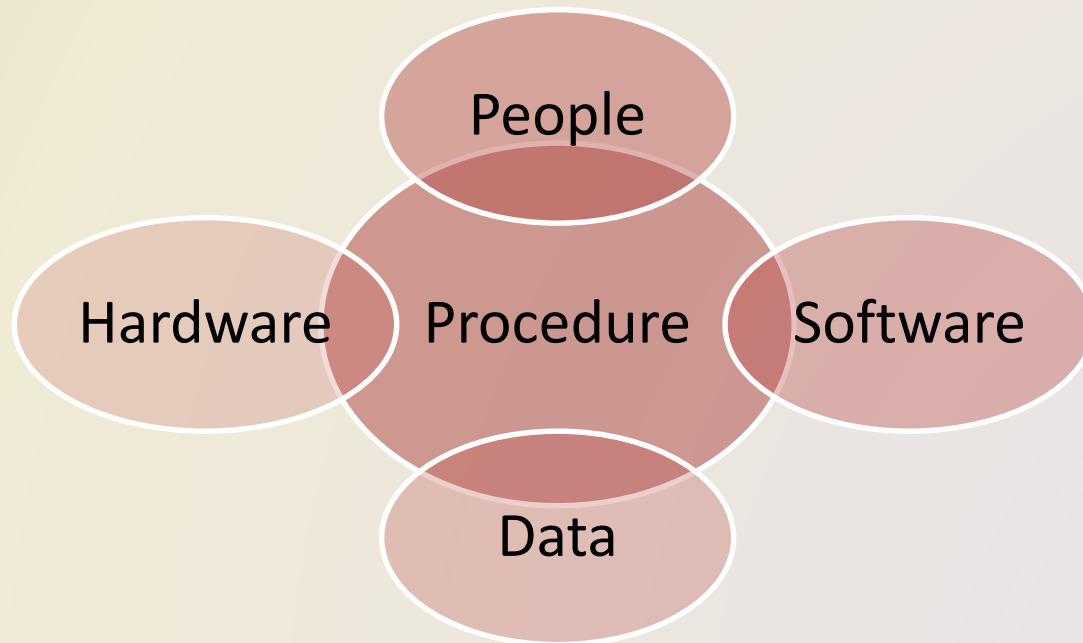


Planning	Organizing
1. Vision & Mission 2. Strategizing 3. Goals & Objectives	1. Organization Design 2. Culture 3. Social Networks
Leading	Controlling
1. Leadership 2. Decision Making 3. Communications 4. Groups/Teams 5. Motivation	1. Systems/Processes 2. Strategic Human Resources



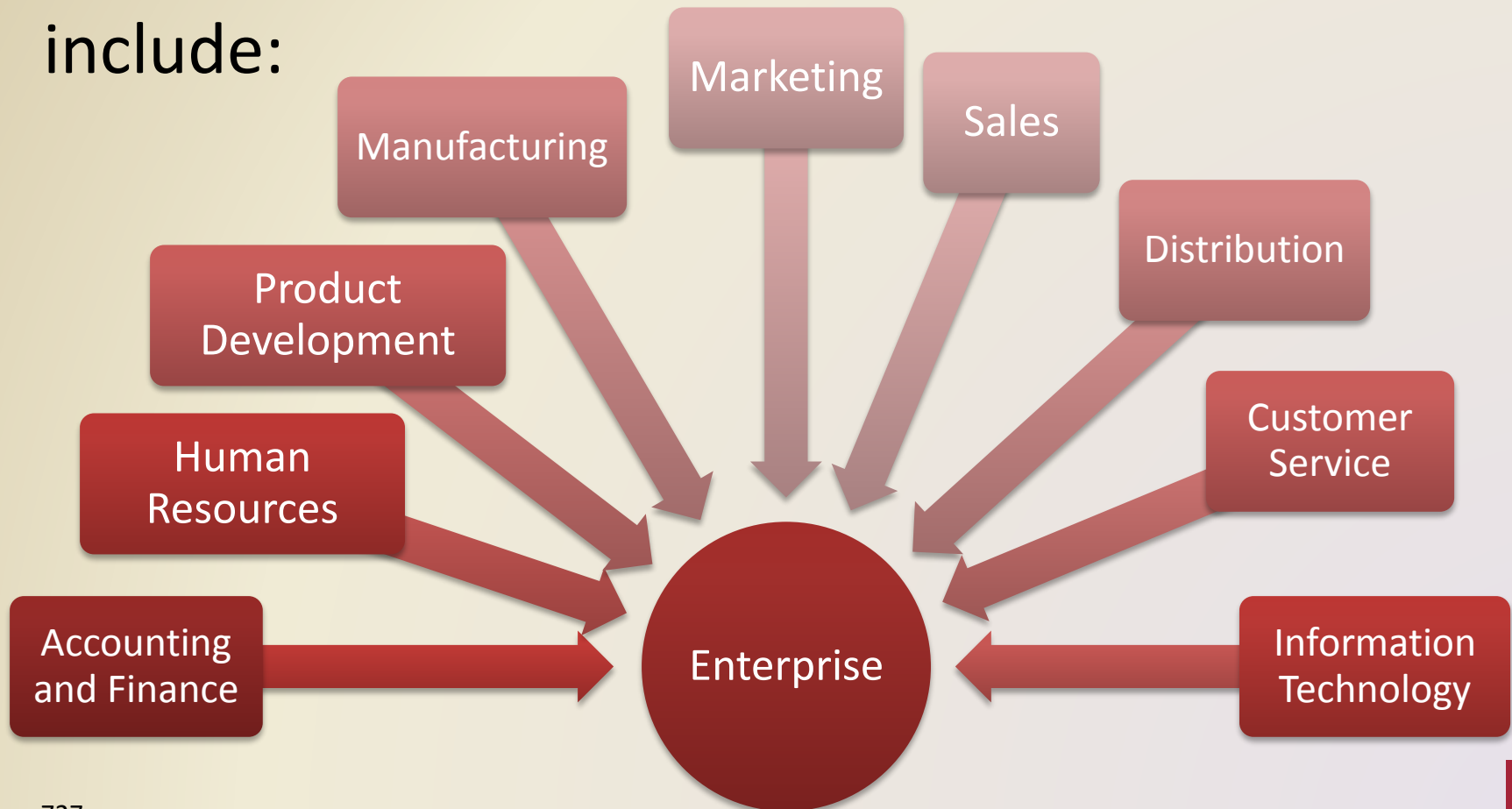
# Information Systems in the Enterprise

- An **information system** is a set of hardware, software, data, people, and procedures that work together to produce information



# Information Systems in the Enterprise

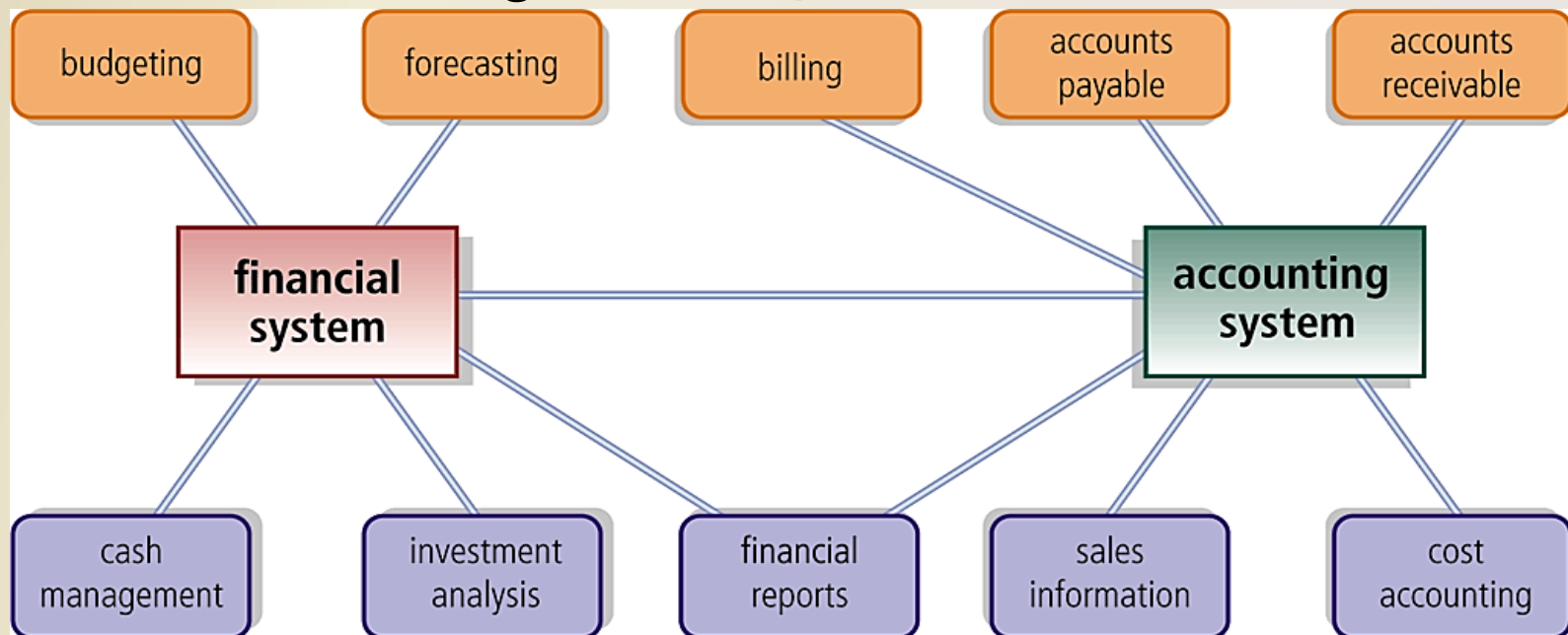
- Functional units within an enterprise might include:





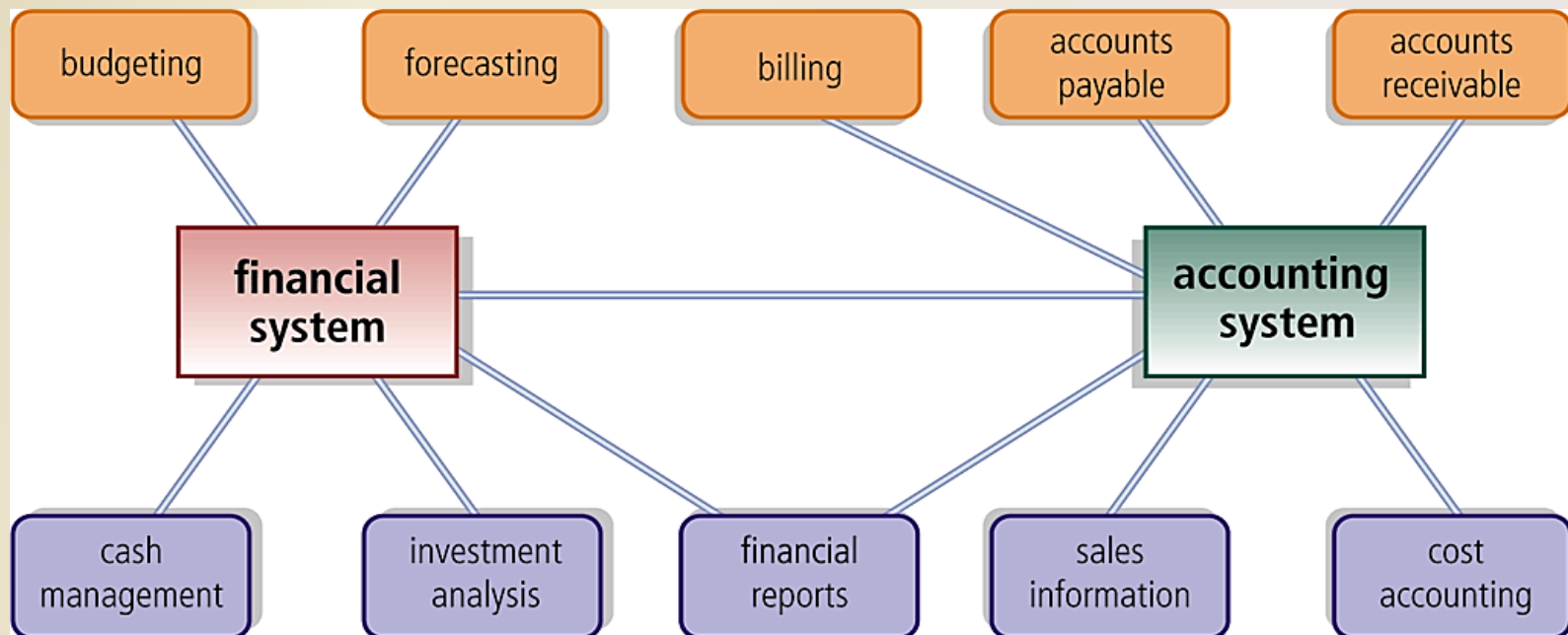
# Information Systems in the Enterprise

- **Accounting software** manages everyday transactions:
  - ✓ Sales information & billing
  - ✓ Accounts receivable & payable (khoản thu & chi)
  - ✓ Cost accounting (hạch toán giá thành)



# Information Systems in the Enterprise

- **Financial software** helps managers budget, forecast, and analyze.



# Information Systems in the Enterprise

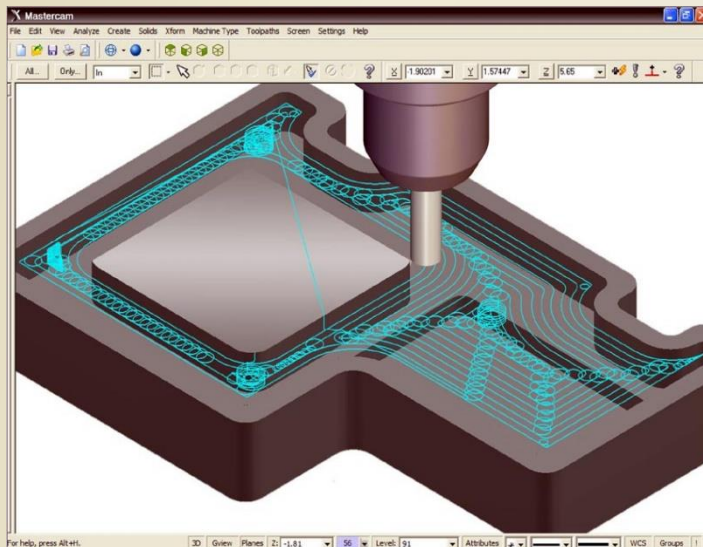
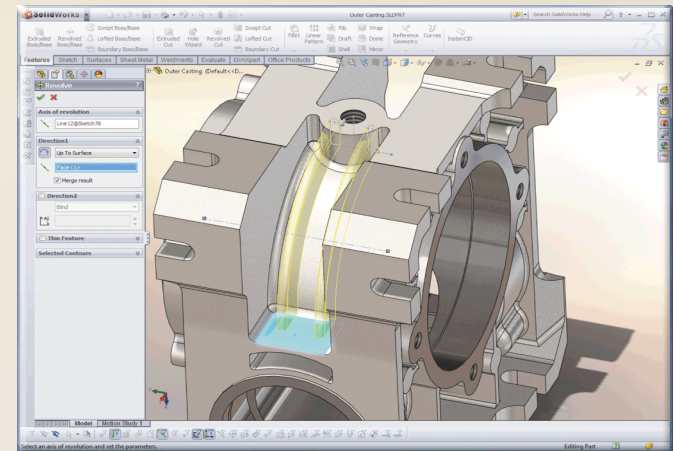
- A **human resources information system (HRIS)** manages one or more human resources functions such as:
  - Employee info
  - Payroll
  - Recruiting and training
  - Performance analysis and review

The screenshot displays the 'Optimum Suite' HRIS interface. At the top, a title bar reads 'Optimum Suite [Break, Joan M. - Personal]'. Below it is a menu bar with 'File', 'Edit', 'View', 'Window', 'Tools', and 'Help'. The main window is divided into several sections. On the left, a vertical sidebar lists various HR functions: Employee Select, Employee Functions, Employee Info, Current Job, Reports, Benefits, Taxes, Dependent/Beneficiary, Paid Time Off, Employment History, Education History, Skills, Attendance, Property, Events, Safety, Wellness, Labor Allocation, Direct Deposit, Training, and Custom Forms. The 'Employee Select' section is active, showing a table with columns: Company Name, Employee ID, Employee Name, Org Level 3, Email, and Termination Date. The table contains three rows of data for 'Optimum Solutions'. Below the table, the 'Employee Functions' section is expanded, showing a form for 'Joan M. Break'. The form includes fields for First Name, Middle Name, Last Name, Salutation, Social Security, Suffix, Sex, Ethnic Code, Marital Status, Birth Date, Age, Graduation Date, Student status, Date Deceased, and Smoker status. A photo of Joan M. Break is displayed on the right. The bottom status bar shows '31.103051 Administrator administrator SuiteDemo3 2:22 PM'.

Company Name	Employee ID	Employee Name	Org Level 3	Email	Termination Date
Optimum Solutions	30	Break, Joan M.	Admin	jbreak@optimum.com	
Optimum Solutions	554	Carter, Tiffany	Quality Assurance	T.Carter@yahoo.com	
Optimum Solutions	555	Davenport, Kristen	Executive	k.davenport@hotmail.com	

# Information Systems in the Enterprise

- **Computer-aided design (CAD)** uses a computer and special software to aid in engineering, *drafting*, and design

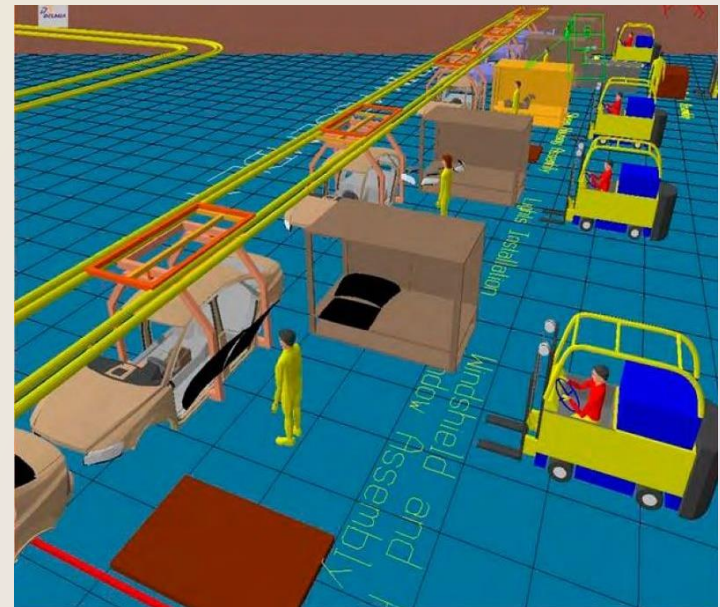


- **Computer-aided manufacturing (CAM)** is the use of computers to *control* production equipment



# Information Systems in the Enterprise

- **Computer-integrated manufacturing (CIM)** uses computers to *integrate* the many different operations of the manufacturing process



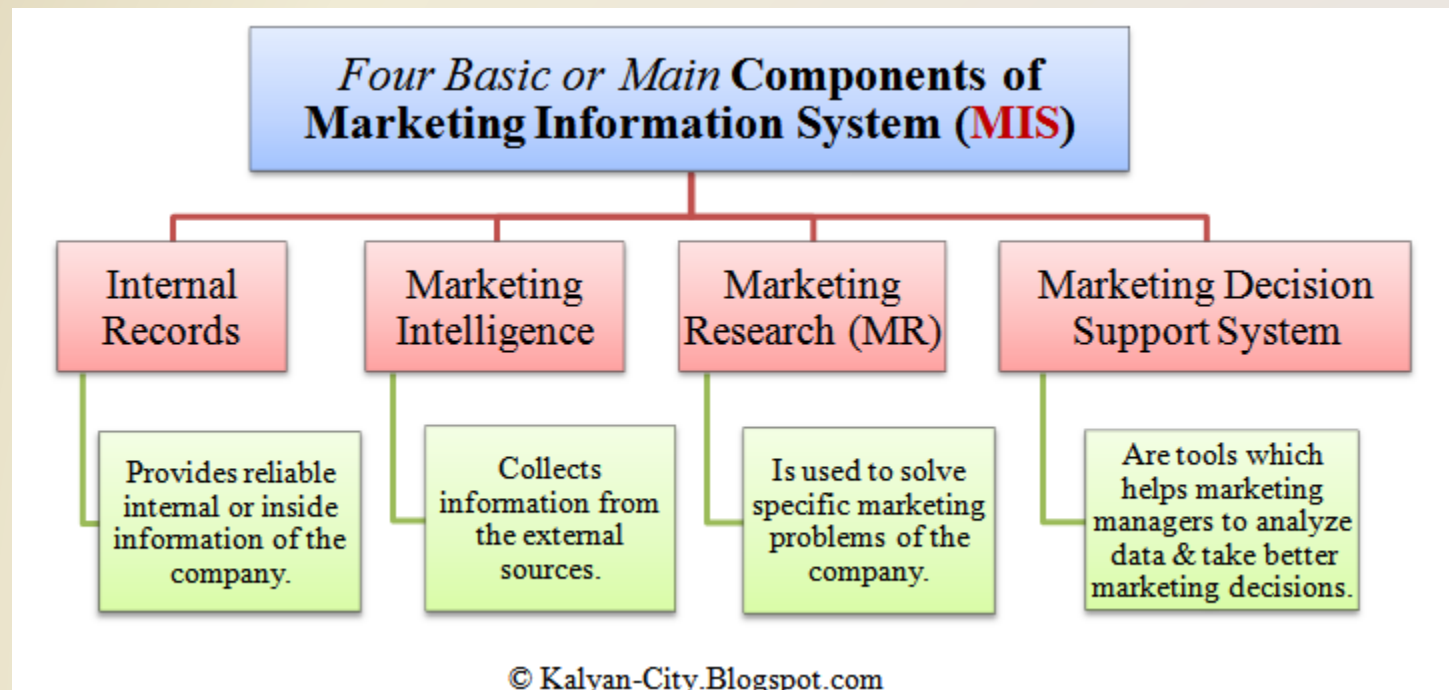
# Information Systems in the Enterprise

- **Quality control system** helps an organization maintain or improve the quality of its products or services.
- *ISO 9001* is the world's most popular standard for quality management systems.

ISO 9001 helps businesses and organizations to **be more efficient** and **improve customer satisfaction**.

# Information Systems in the Enterprise

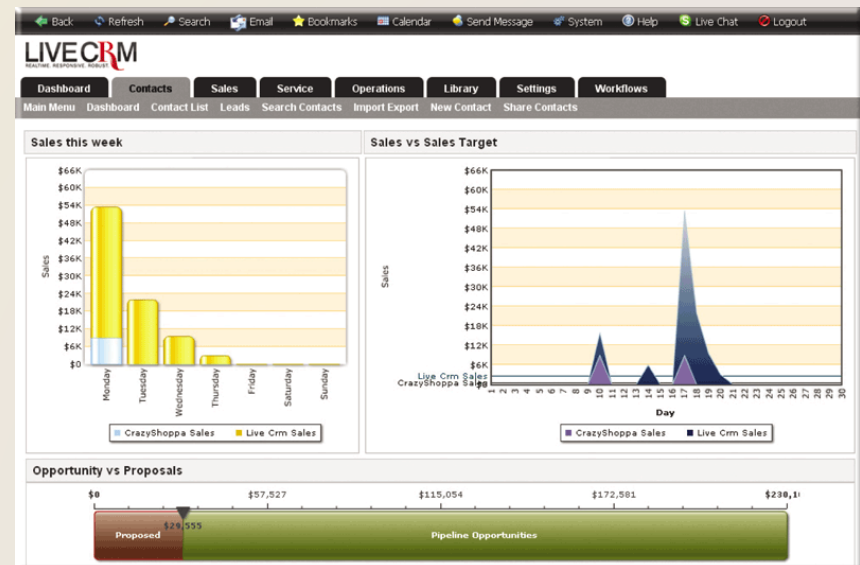
- **Marketing information system (MIS)** serves as a central repository for the tasks of a marketing department





# Information Systems in the Enterprise

- **Sales force automation (SFA)** software equips traveling salespeople with the *electronic tools* they need to be more productive.
- SFA covers:
  - Inventory information
  - Sales processing
  - Log customer interactions.



# Information Systems in the Enterprise

- **Distribution systems** perform the following functions:

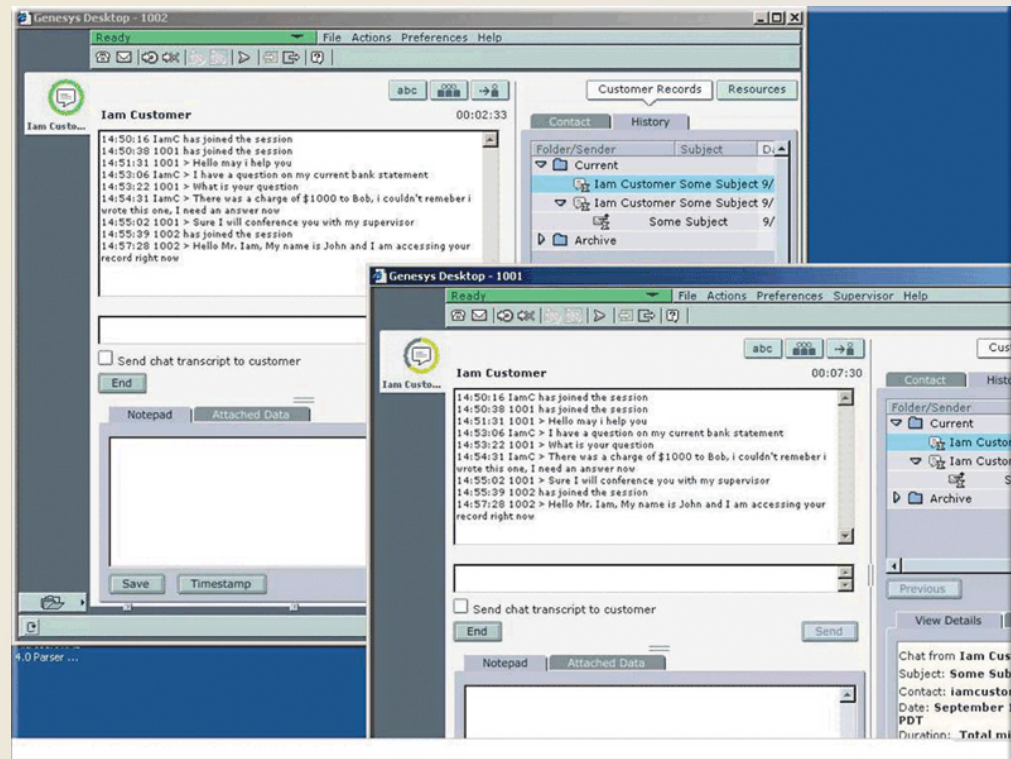
Provide forecasting  
for inventory  
control

Track shipping of  
products

Provide information  
and analysis on  
inventory in a  
warehouse

# Information Systems in the Enterprise

- **Customer interaction management (CIM)**  
software manages the day-to-day interactions with customers



# Information Systems in the Enterprise

- **The IT department** makes technology decisions for the enterprise
  - Whether to build or buy new information systems
  - When a computer or information system has outlived its useful life
- Web site management programs collect data designed to help organizations make informed decisions regarding their Web presence

# Information Systems in the Enterprise

- General purpose information systems generally fall into one of five categories



Office  
Information  
System

Transaction  
Processing  
System

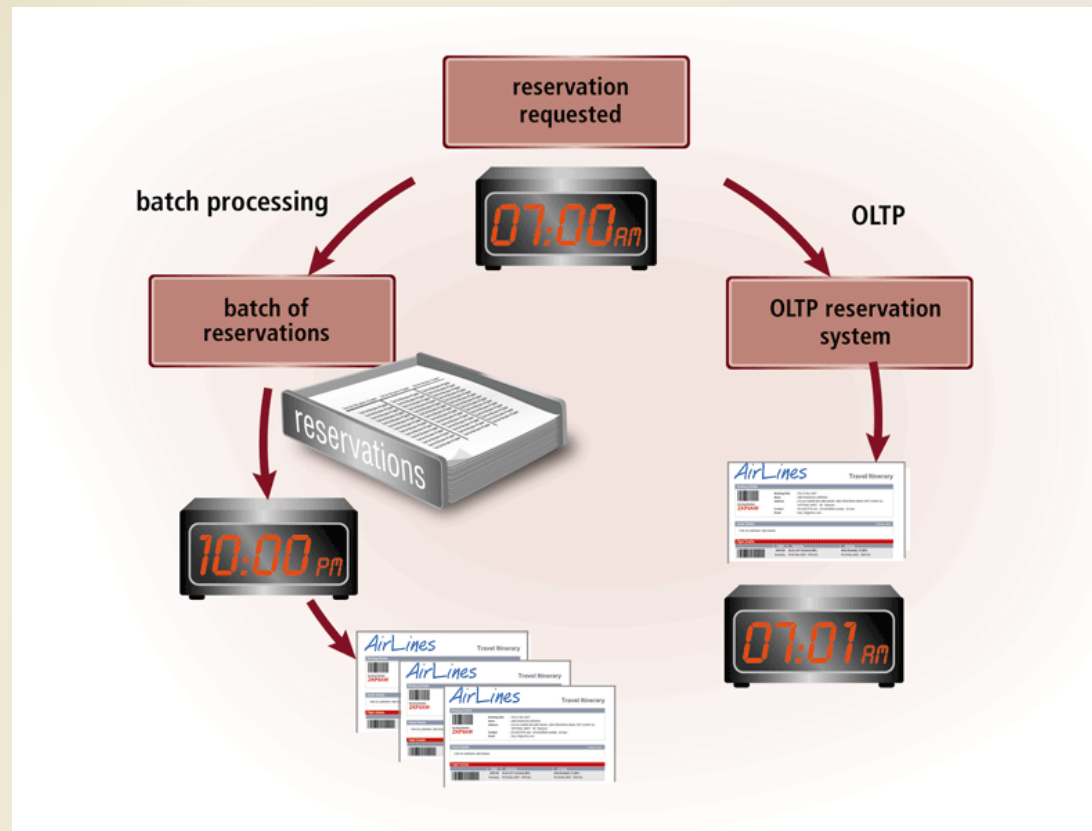
Management  
Information  
System

Decision  
Support  
System

Expert System

# Information Systems in the Enterprise

- Batch processing vs. online transaction processing



# Information Systems in the Enterprise

## Integrated Information Systems

**Customer relationship management** manages information about customers, interactions with customers, past purchases, and interests

**Enterprise resource planning** provides centralized, integrated software to help manage and coordinate ongoing activities

**Content management systems** are information systems that combine databases, software, and procedures

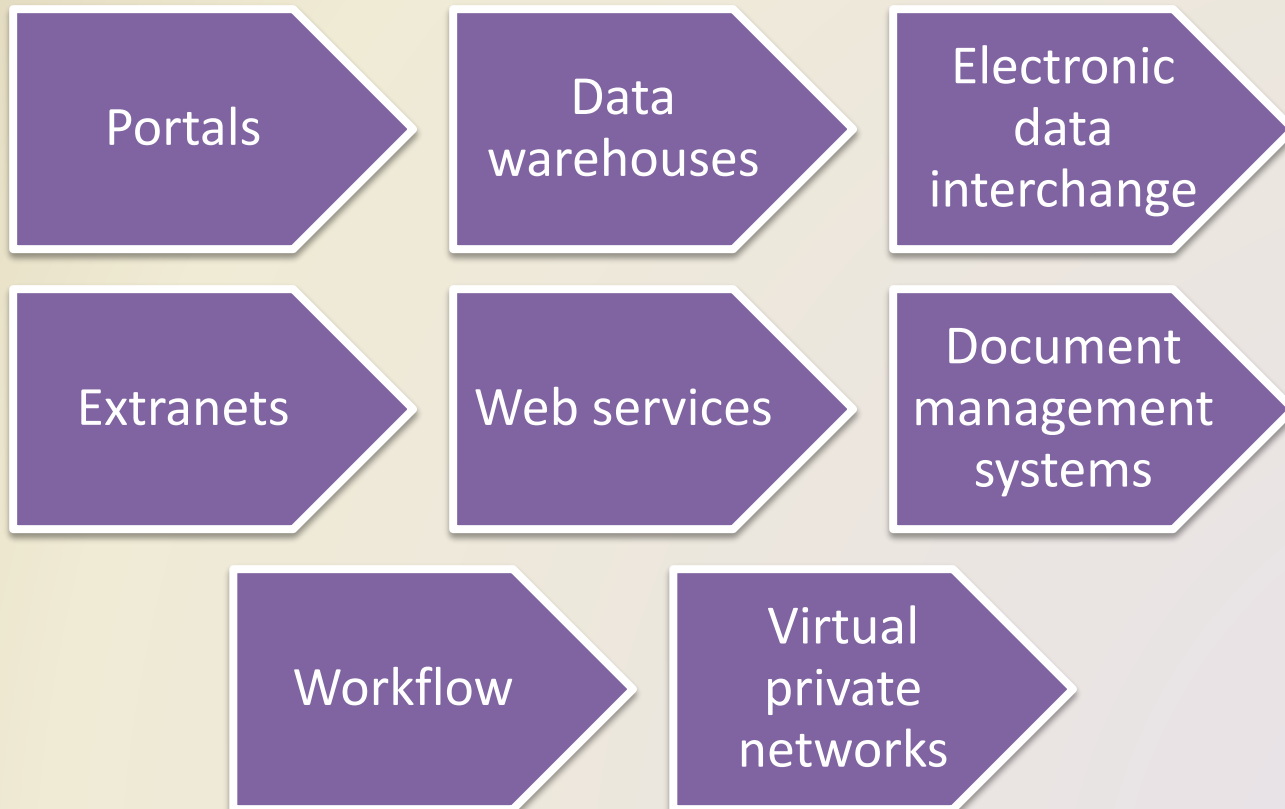


# Information Systems in the Enterprise



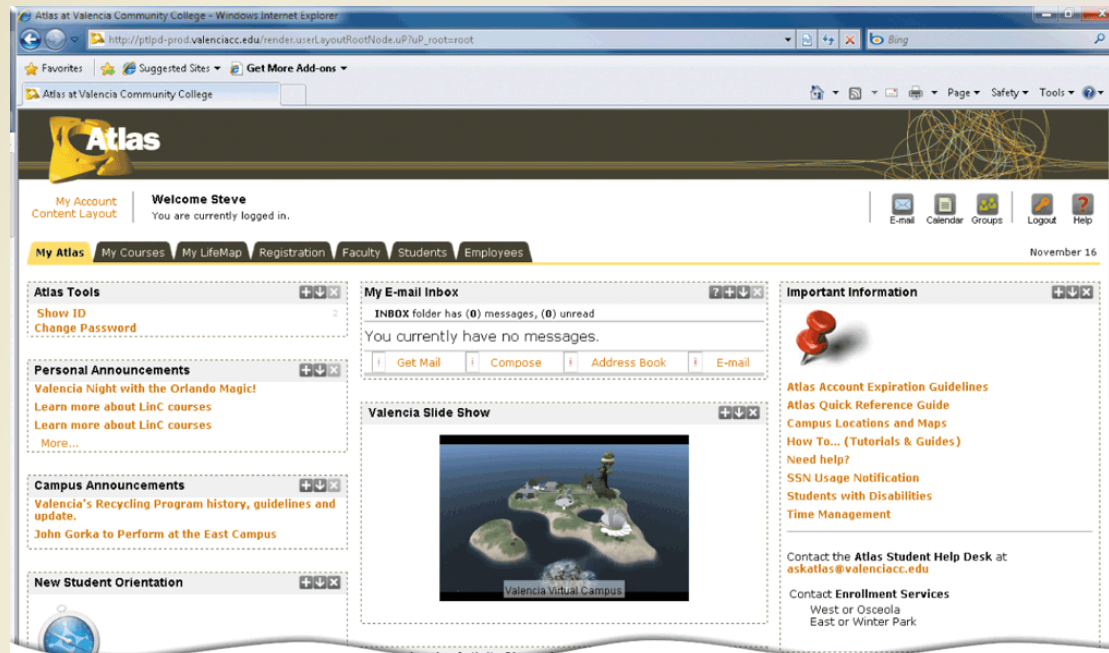
# Enterprise-Wide Technologies and Methodologies

- Some technologies used in enterprises include:



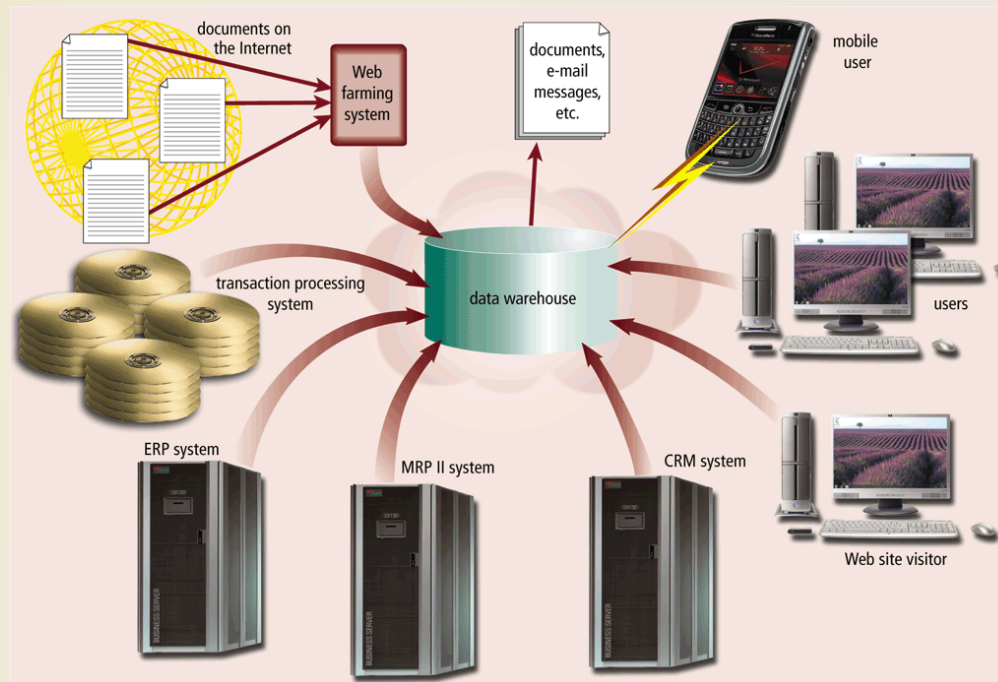
# Enterprise-Wide Technologies and Methodologies

- A **portal** is one special web page that brings information together from diverse sources in a uniform way.



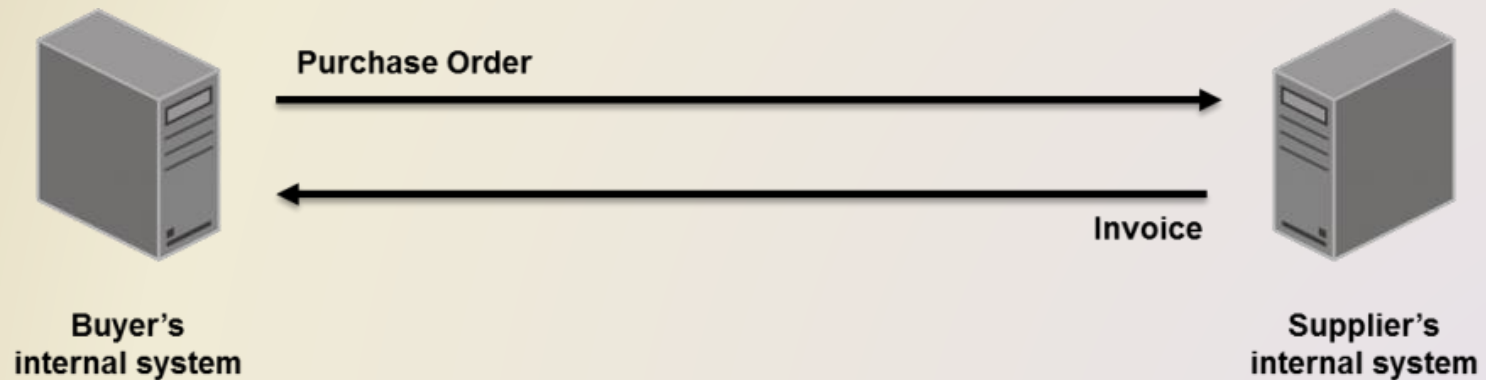
# Enterprise-Wide Technologies and Methodologies

- A **data warehouse** is a *huge database* that stores and manages the data required to analyze historical and current transactions



# Enterprise-Wide Technologies and Methodologies

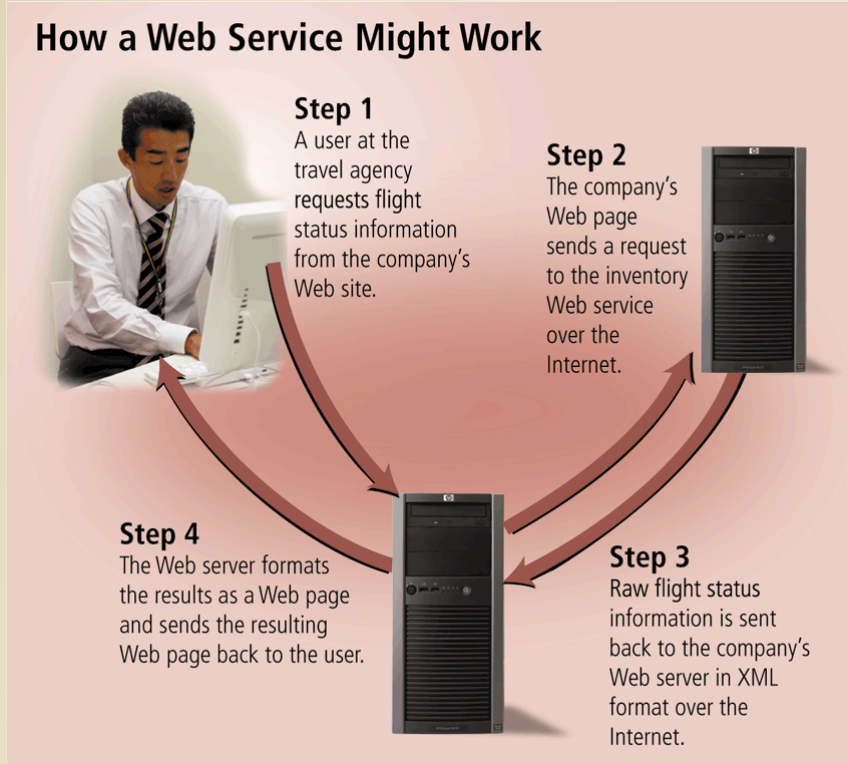
- **Electronic Data Interchange (EDI)** is the computer-to-computer exchange of business documents in a standard electronic format between business partners.





# Enterprise-Wide Technologies and Methodologies

- **Web services** allow businesses to create products and B2B interactions over the Internet



In a service-oriented architecture, information systems provide services to other information systems in a well-defined manner over a network

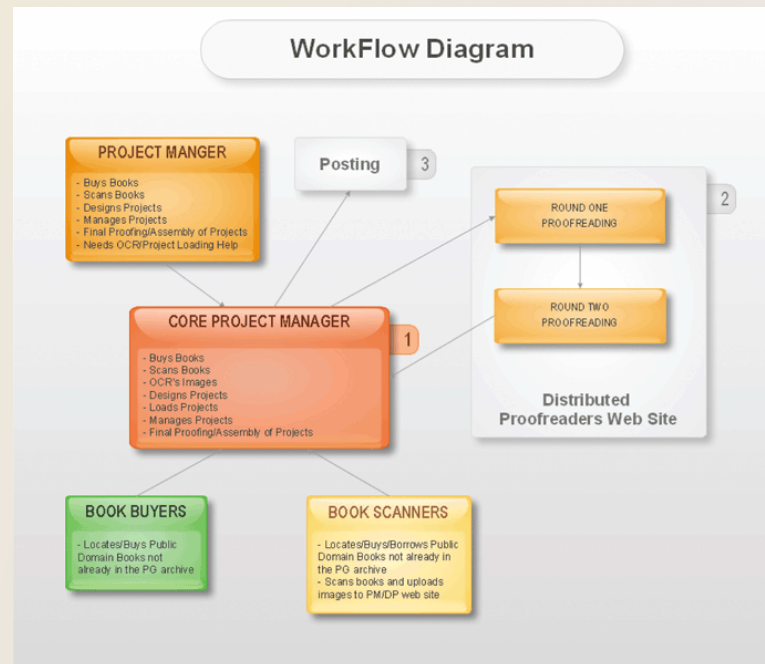
# Enterprise-Wide Technologies and Methodologies

- A **document management system (DMS)** allows for storage and management of a company's documents
  - Stored in a repository



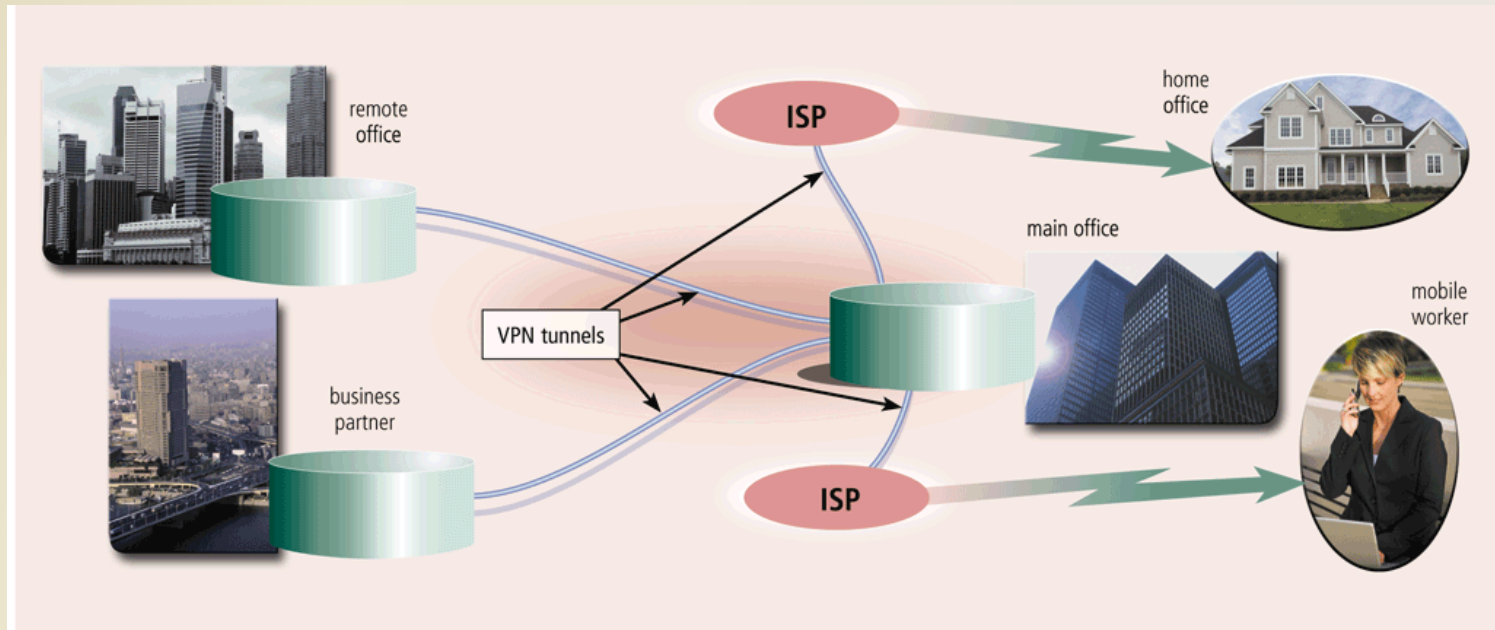
# Enterprise-Wide Technologies and Methodologies

- A **workflow** is a defined process that identifies the specific set of steps involved in completing a particular project or business process
  - **Workflow application**



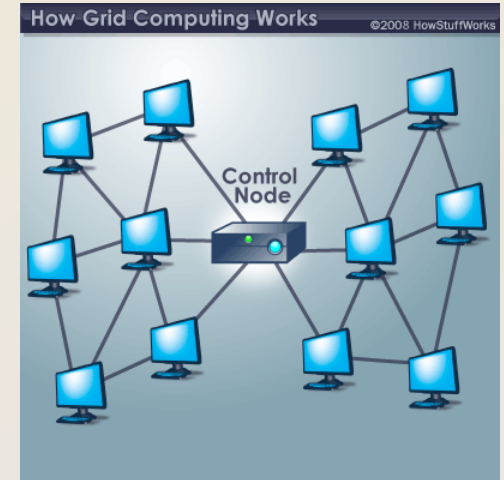
# Enterprise-Wide Technologies and Methodologies

- A **virtual private network (VPN)** provides mobile users, vendors, and customers with a *secure connection to the company network server*



# Virtualization and Cloud Computing

**Cloud computing** is an *Internet service* that provides computing needs to computer users



**Grid computing** combines many servers and/or personal computers on a network to act as one large computer

# Virtualization and Cloud Computing

- Virtualization is the practice of sharing or pooling computing resources

## Server virtualization

- Provides the capability to divide a physical server logically into many virtual servers

## Storage virtualization

- Provides the capability to create a single logical storage device from many physical storage devices

Chapter Fourteen

# Enterprise Computing

## Discovering Computers 2012

**Your Interactive Guide  
to the Digital World**

**Chapter 14 Complete**

