

APPLIED IT FOR BUSINESS

Chapter 7

Electronic Business Systems

Irawan Afrianto, M.T

Program Magister Manajemen

Univesitas Komputer Indonesia (UNIKOM)

Learning Objectives

- Identify the following cross-functional enterprise systems, and give examples of how they can provide significant business value to a company
 - Enterprise application integration
 - Transaction processing systems
 - Enterprise collaboration systems

Learning Objectives

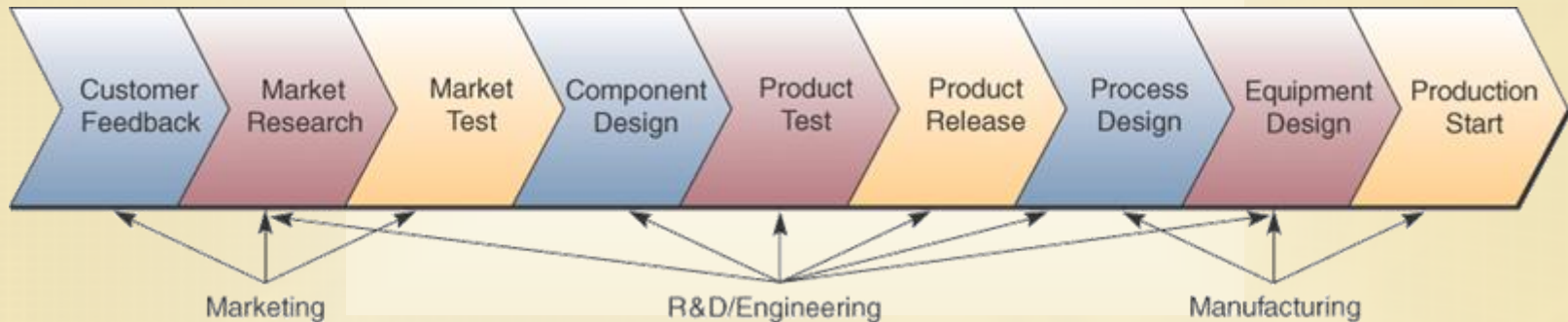
- Give examples of how Internet and other information technologies support business processes within the business functions of
 - Accounting
 - Finance
 - Human resource management
 - Marketing
 - Production
 - Operations management

Enterprise Business Systems

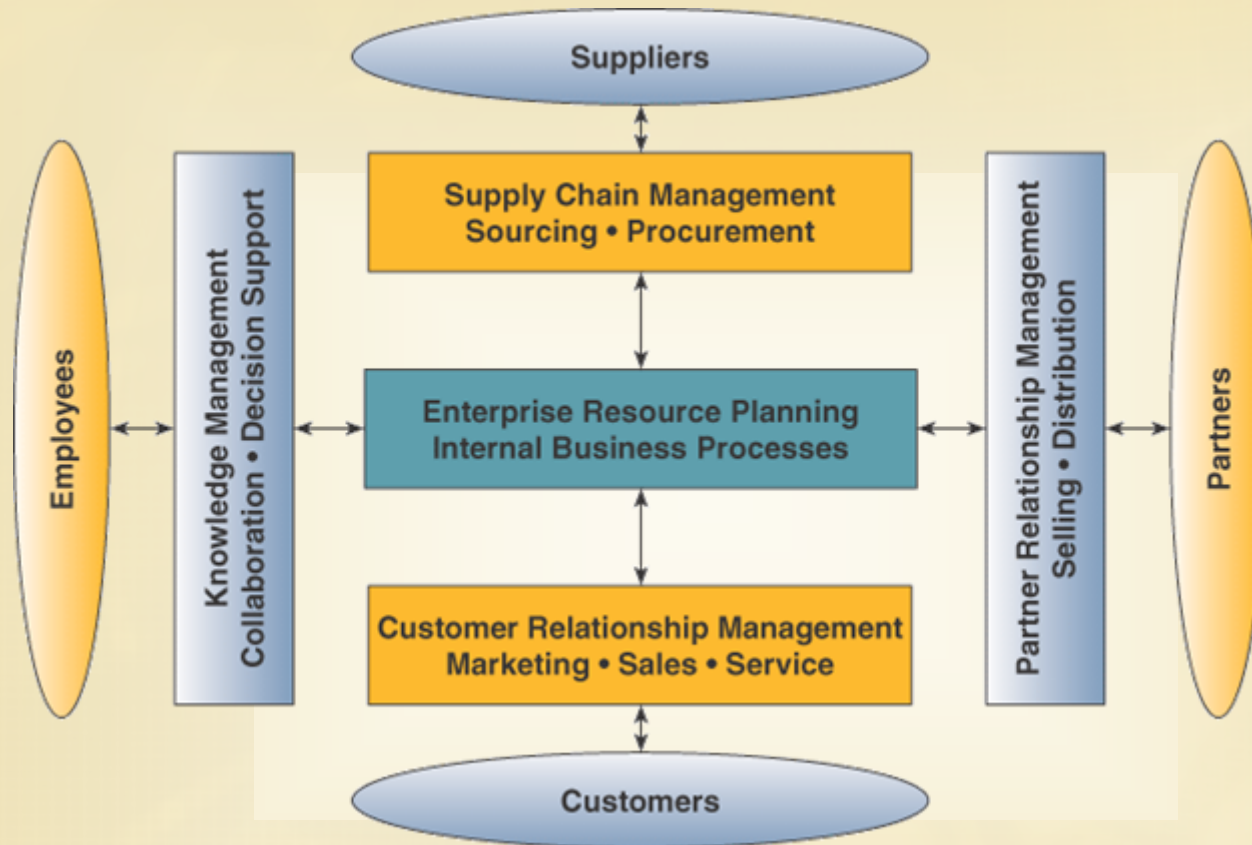
- E-business means using the Internet, other networks, and IT to support
 - Electronic commerce
 - Enterprise communications and collaboration
 - Web-enabled business processes
- E-commerce is the buying, selling, and marketing of products, services, and information over the Internet and other networks

Cross-Functional Systems

- Cross the boundaries of traditional business functions
 - Used to reengineer and improve vital business processes all across the enterprise



Enterprise Application Architecture



Enterprise Application Architecture

- Provides a conceptual framework
 - Helps visualize the basic components, processes, and interfaces of major e-business applications
- Focuses on accomplishing fundamental business processes in concert with
 - Customers
 - Suppliers
 - Partners
 - Employees

Enterprise Application Architecture

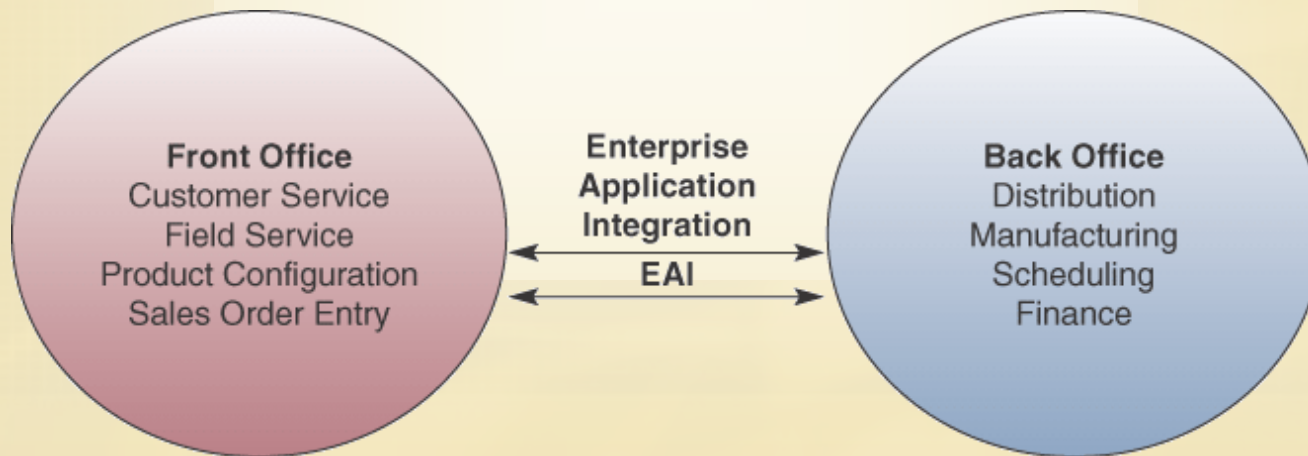
- Enterprise Resource Planning (ERP)
 - Concentrates on the efficiency of internal production, distribution, and financial processes
- Customer Relationship Management (CRM)
 - Focuses on acquiring and retaining profitable customers via marketing, sales, and services
- Partner Relationship Management (PRM)
 - Aims at acquiring and retaining partners who can enhance the selling and distribution of products and services

Enterprise Application Architecture

- Supply Chain Management (SCM)
 - Focuses on developing the most efficient and effective sourcing and procurement processes
- Knowledge Management (KM)
 - Focuses on facilitating internal group collaboration and decision support

Enterprise Application Integration

- EAI software connects cross-functional systems
- Serves as middleware to provide
 - Data conversion
 - Communication between systems
 - Access to system interfaces



How EAI Works

How EAI works:

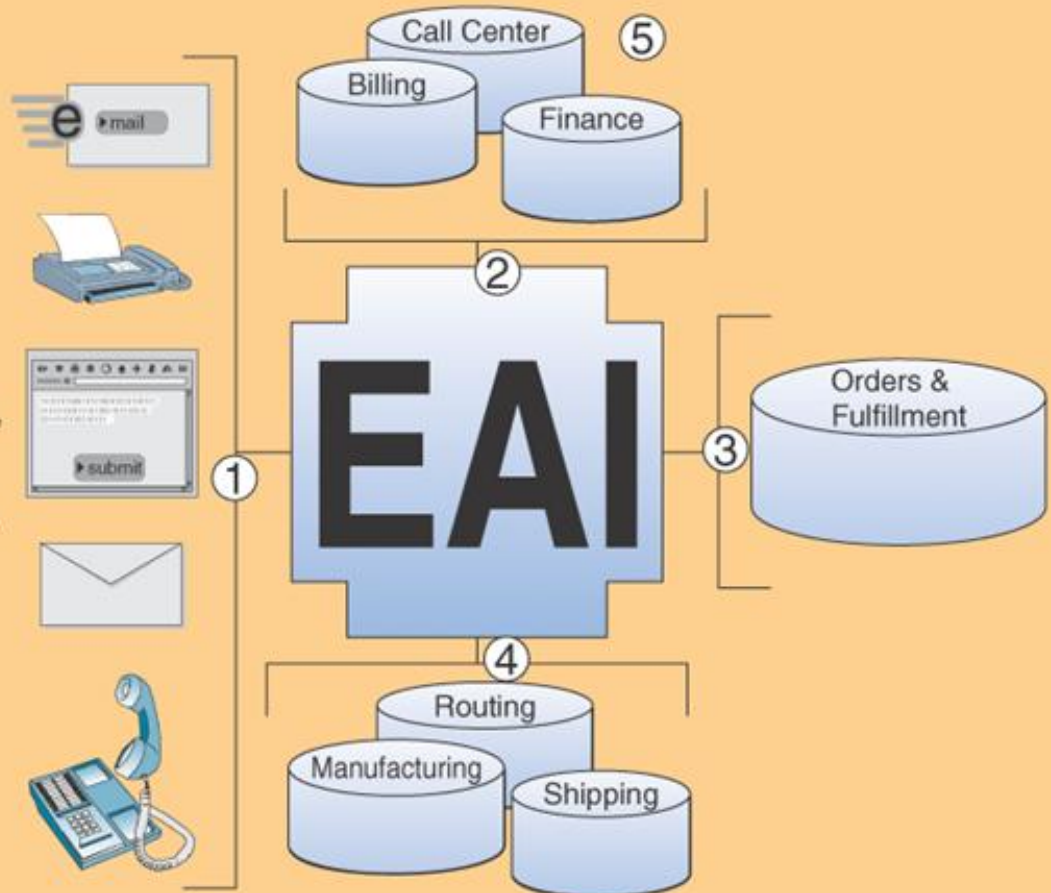
1 An order comes in via the call center, mail, e-mail, the Web, or fax.

2 Customer information captured in the order process is sent to a "new customer" process, which distributes the new customer information to multiple applications and databases.

3 Once the order is validated (customer, credit, items), relevant details are sent to order fulfillment—which may pick the requested items from inventory, schedule them for manufacture, or simply forward them.

4 Fulfillment returns status and shipment info to the order-entry system...

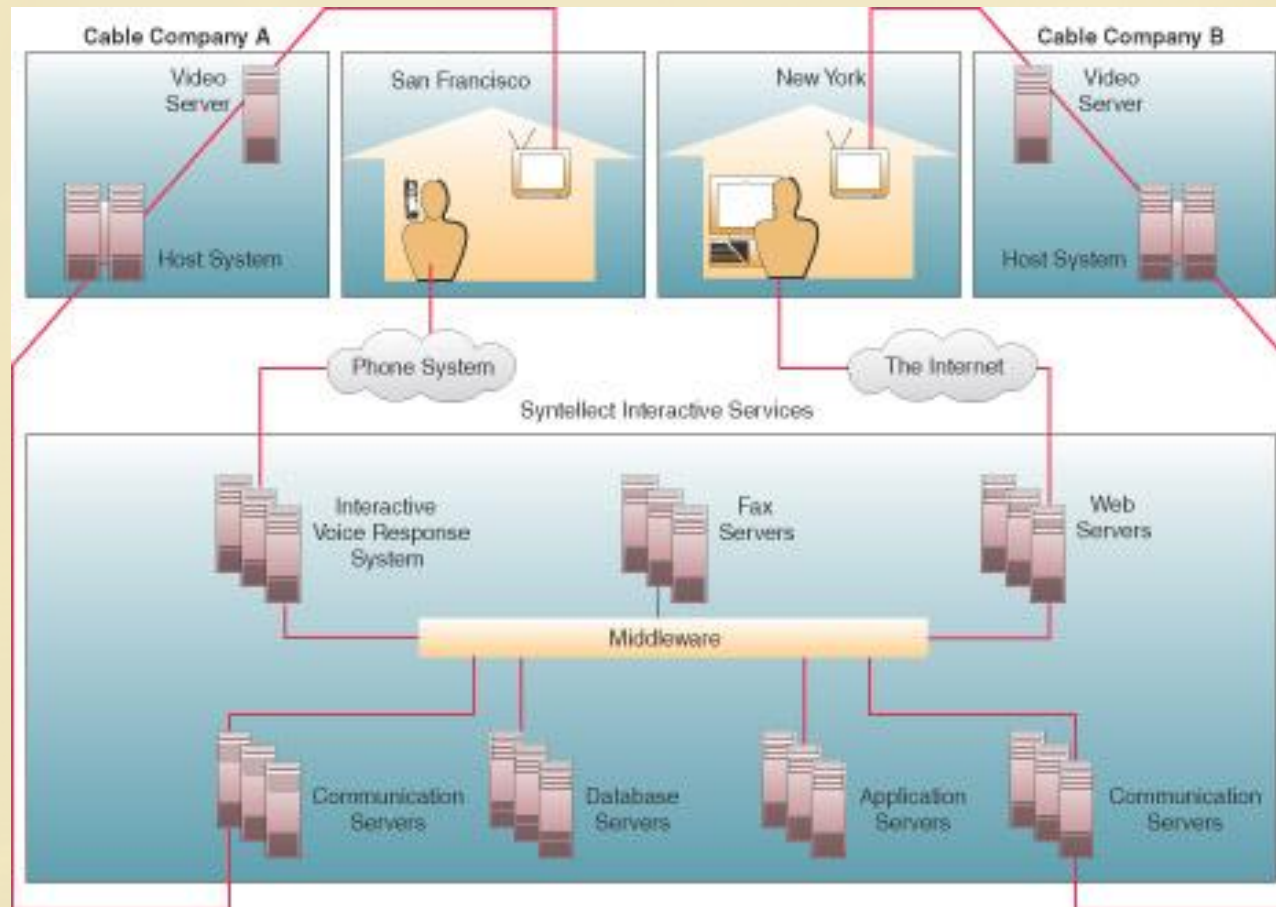
5 ...and to the call center, which needs to know about outstanding orders.



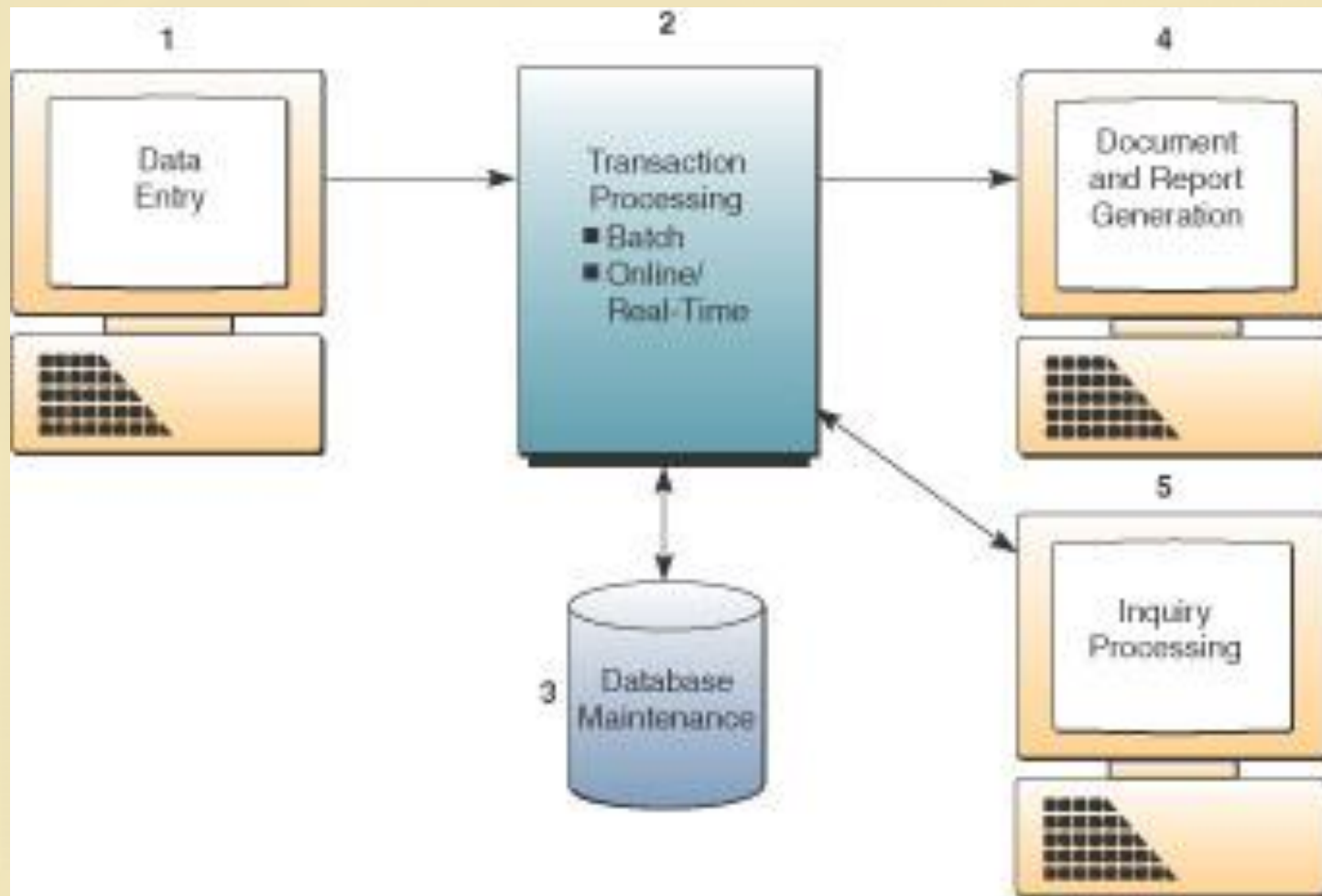
Transaction Processing Systems

- Cross-functional information systems that process data resulting from the occurrence of business transactions
 - **Transactions** include sales, purchases, deposits, withdrawals, refunds, and payments
 - **Online transaction processing (OLTP)** is a real-time system that captures transactions immediately

Transaction Processing Systems



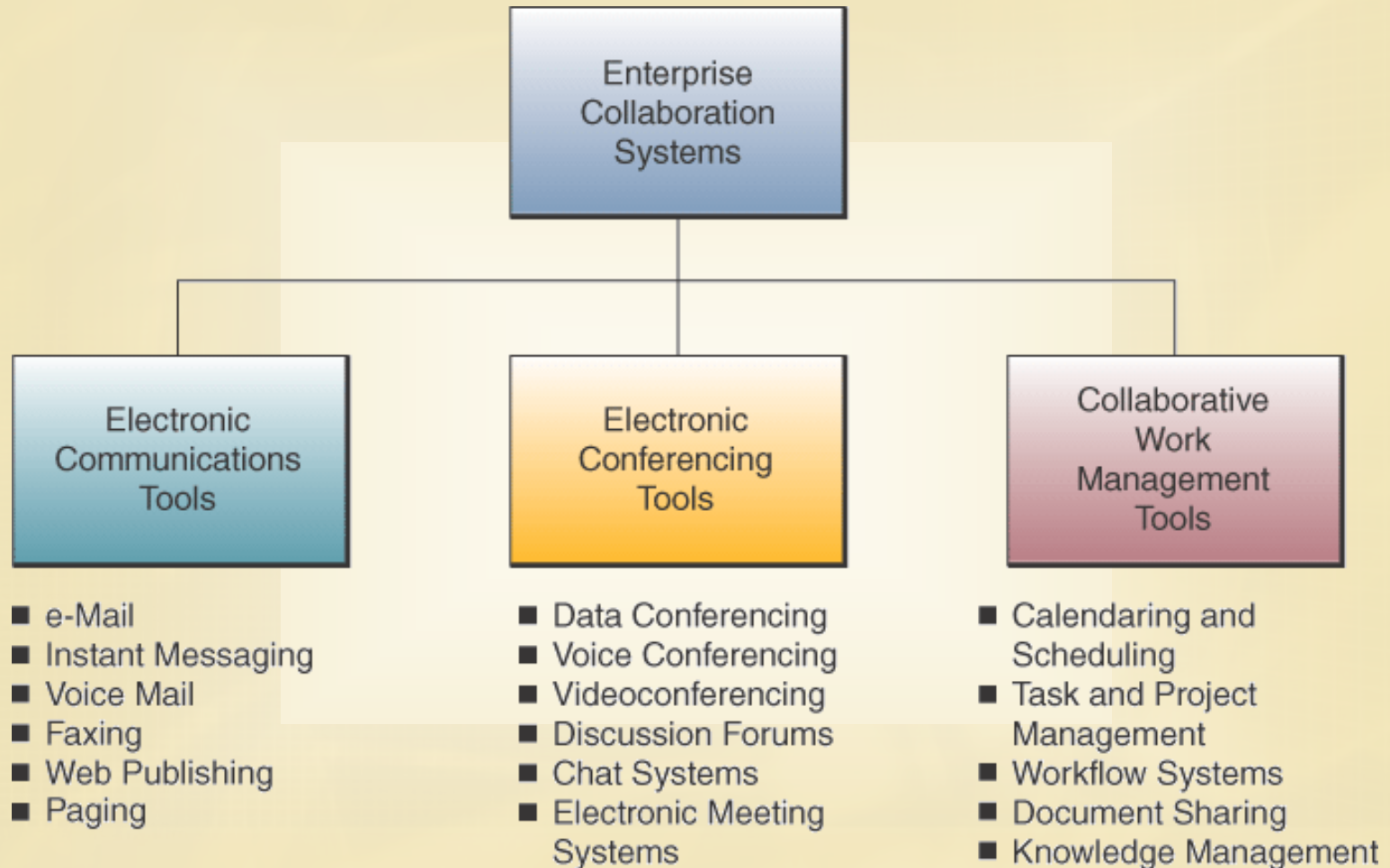
The Transaction Processing Cycle



Enterprise Collaboration Systems (ECS)

- EC systems are cross-functional information systems that enhance team and workgroup
 - Communication
 - Coordination
 - Collaboration
- Systems may include
 - Networked PC workstations
 - Servers
 - Databases
 - Groupware and application packages

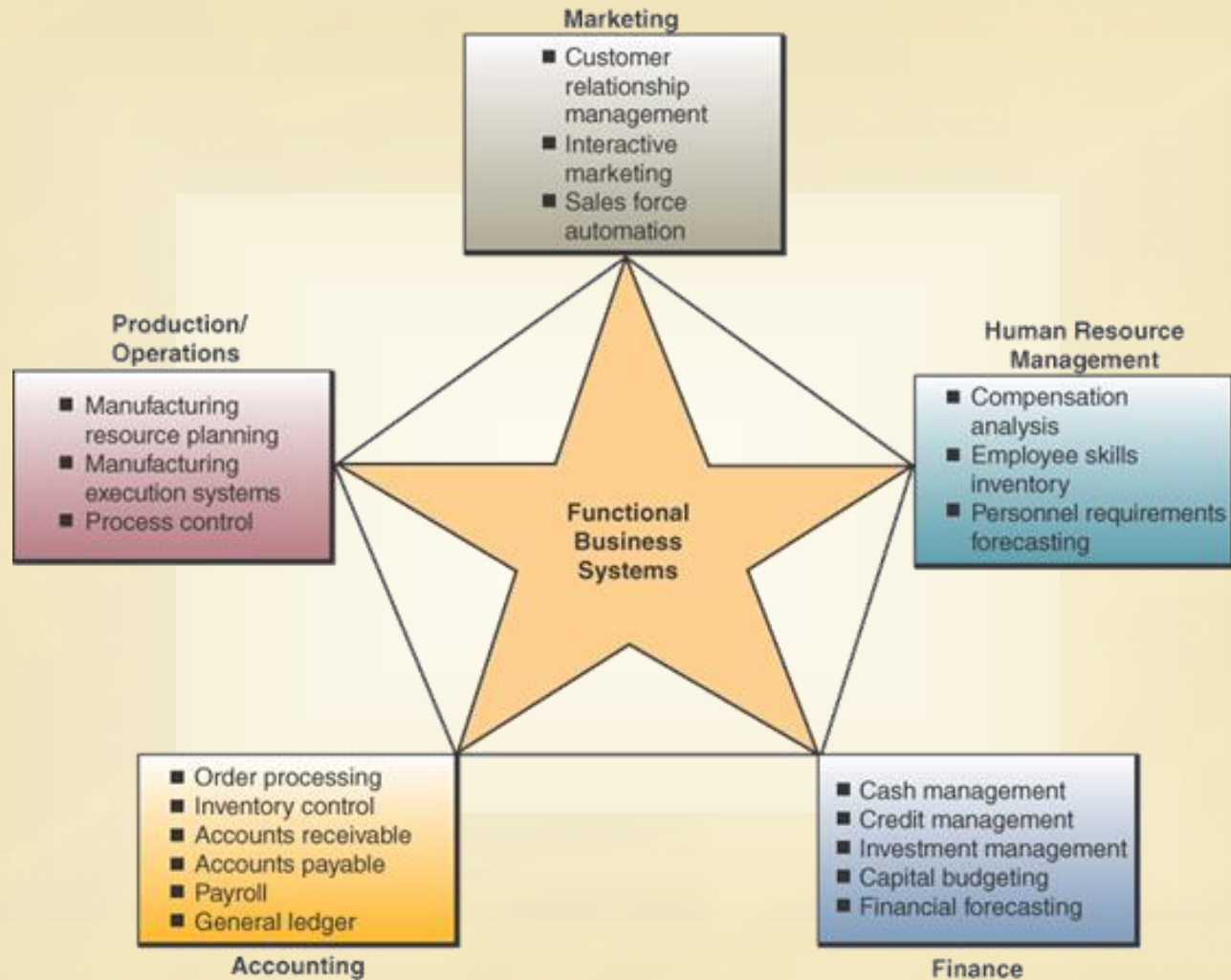
ECS Tools



Functional Business Systems

- A variety of types of information systems that support the business functions of
 - Accounting
 - Finance
 - Marketing
 - Operations management
 - Human resource management

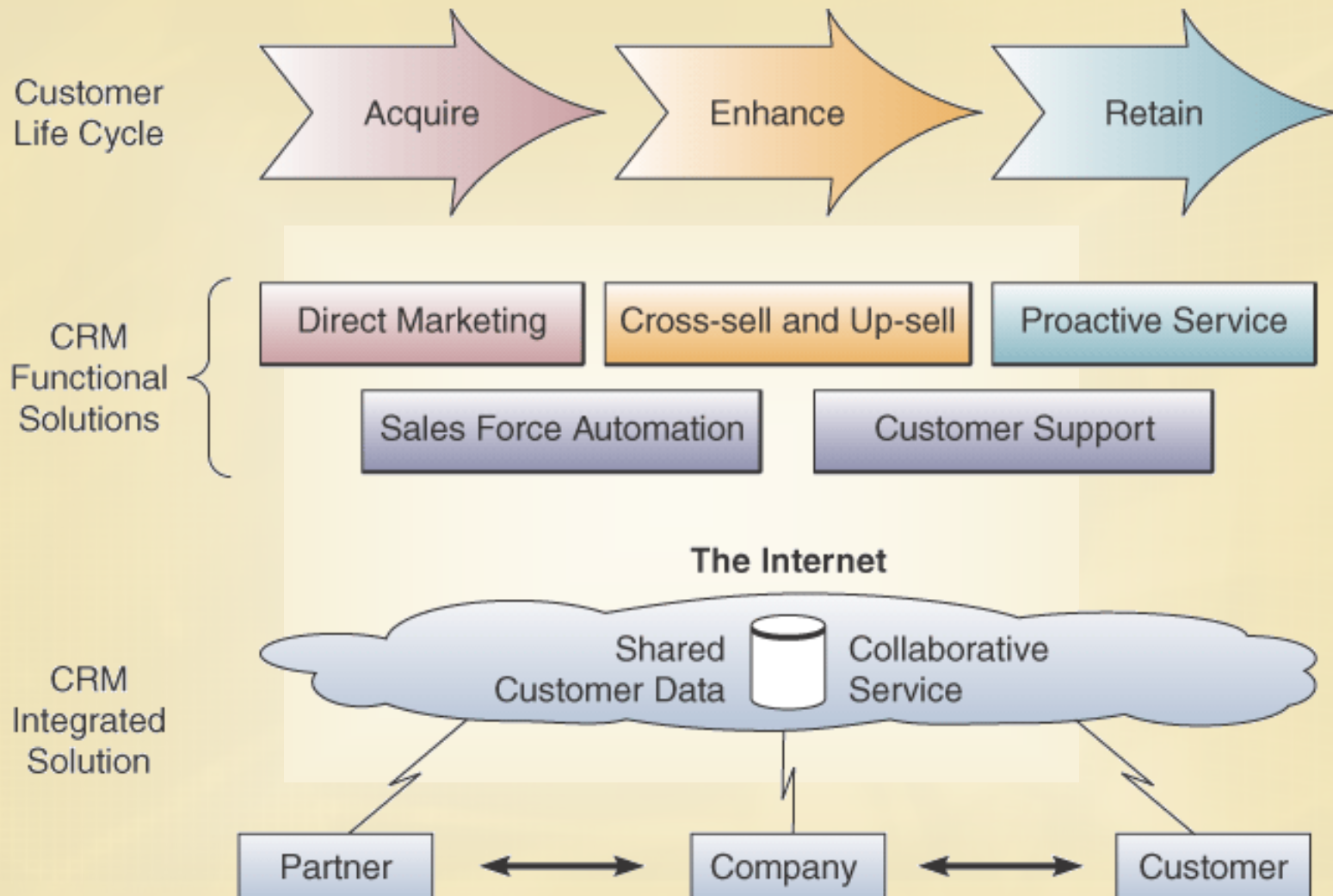
IT in Business



Marketing Systems

- Marketing systems are concerned with
 - Planning, promotion, and sale of existing products in existing markets
 - Development of new products and new markets
 - Better attracting and serving present and potential customers

Marketing Information Systems

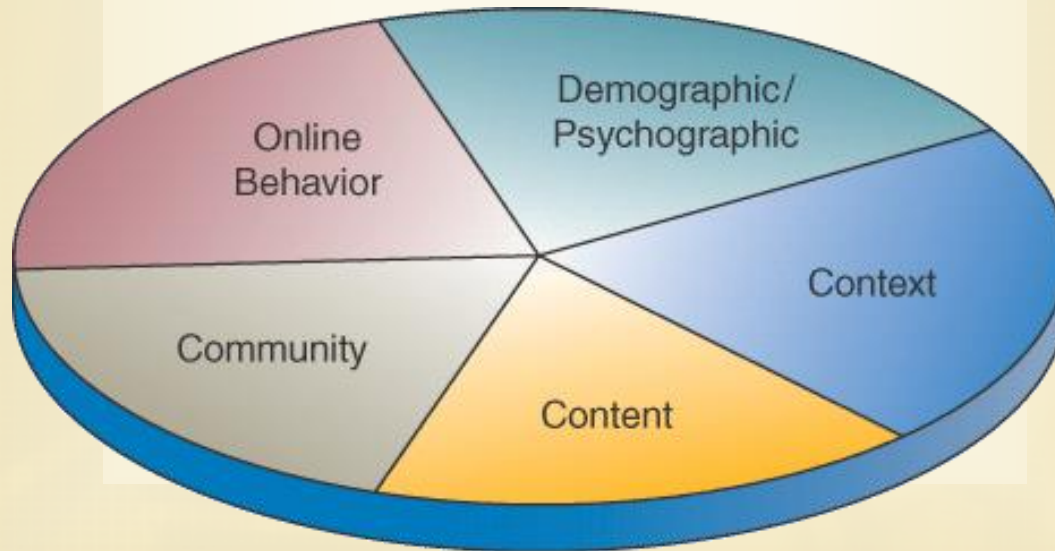


Interactive Marketing

- Interactive Marketing
 - A customer-focused marketing process
 - Uses the Internet, intranets, and extranets
 - Establishes two-way transactions between a business and its customers or potential customers
- Goal
 - Profitably use networks to attract and keep customers
 - Get customers to help create, purchase, and improve products and services

Targeted Marketing

- An advertising and promotion management concept with five targeting components



Targeted Marketing Components

- **Community:** customized ads to appeal to specific virtual communities
- **Content:** ads placed on a variety of selected websites, aimed at a specific audience
- **Context:** ads placed on web pages that are relevant to a product or service
- **Demographic/Psychographic:** web marketing aimed at specific types or classes of people
- **Online behavior:** promotions tailored to each visit to a site by an individual

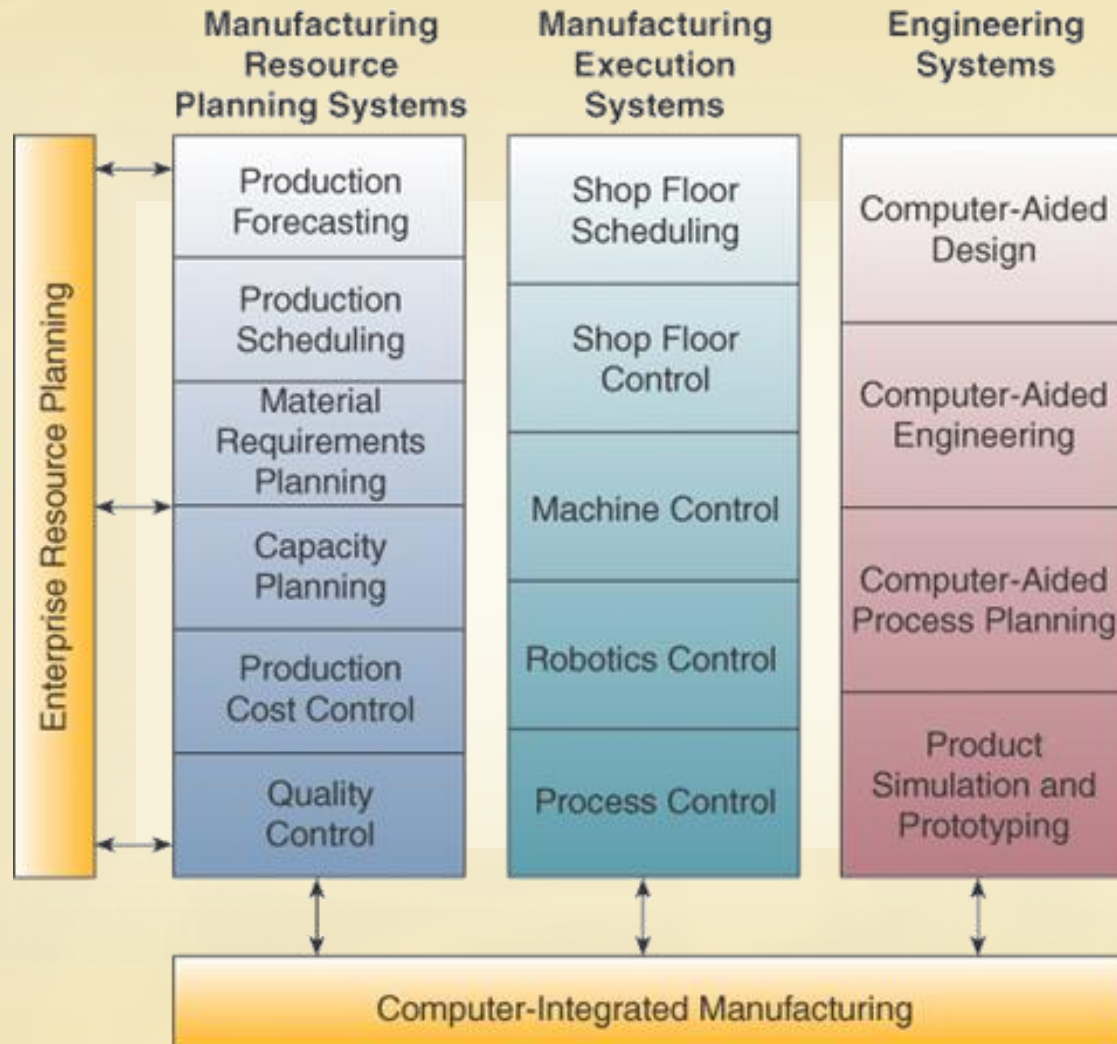
Sales Force Automation

- Outfit sales force with notebook computers, web browsers, and sales contact software
 - Connect them to marketing websites and the company intranet
- Goals
 - Increase personal productivity
 - Speed up capture and analysis of sales data
 - Gain strategic advantage

Manufacturing Information Systems

- Supports the production/operations functions
 - Includes all activities concerned with planning and control of the processes producing goods or services

Computer-Integrated Manufacturing



CIM Objectives

- **Simplify** production processes, product designs, and factory organization
- **Automate** production processes and the business functions that support them
- **Integrate** all production and support processes using
 - Networks
 - Cross-functional business software
 - Other information technologies

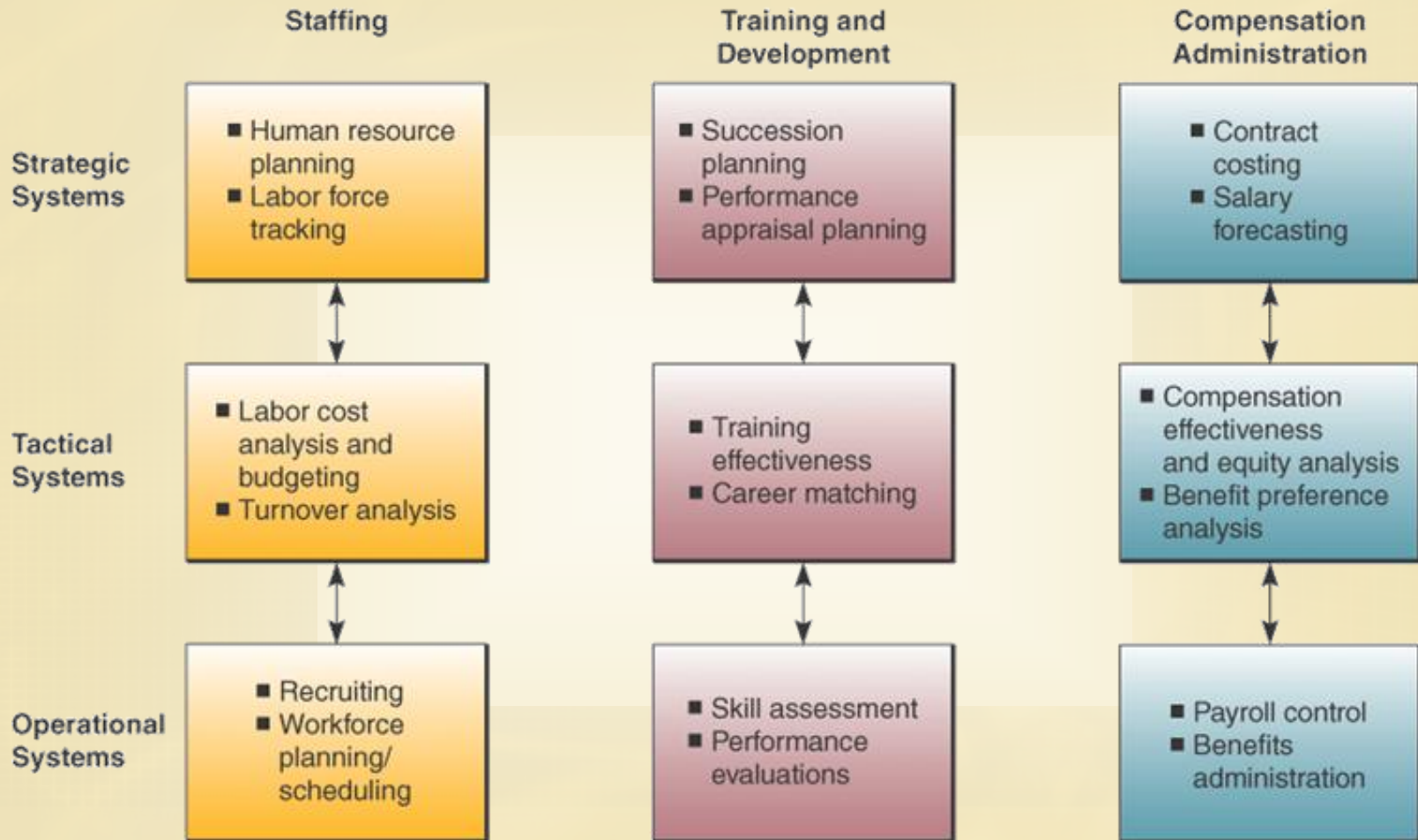
CIM Systems

- Computer-aided manufacturing (CAM)
 - Automate the production process
- Manufacturing execution systems (MES)
 - Performance monitoring information systems for factory floor operations
- Process control
 - Control ongoing physical processes
- Machine control
 - Controls the actions of machines

Human Resource Management (HRM)

- Information systems designed to support
 - Planning to meet personnel needs
 - Development of employees to their full potential
 - Control of all personnel policies and programs

HRM Systems



HRM and the Internet

- Recruiting employees using the corporate website and commercial recruiting services
- Posting messages in selected Internet newsgroups
- Communicating with job applicants via e-mail

HRM and Corporate Intranets

- Corporate intranet uses
 - Process common HRM transactions
 - Allow around-the-clock HRM services
 - Disseminate information faster than through previous company channels
 - Collect information from employees online
 - Allow HRM tasks to be performed with little HRM department intervention
 - Training

Employee Self-Service

- Intranet applications can allow employees to
 - View benefits
 - Enter travel and expense reports
 - Verify employment and salary information
 - Access and update personal information
 - Enter time-sensitive data

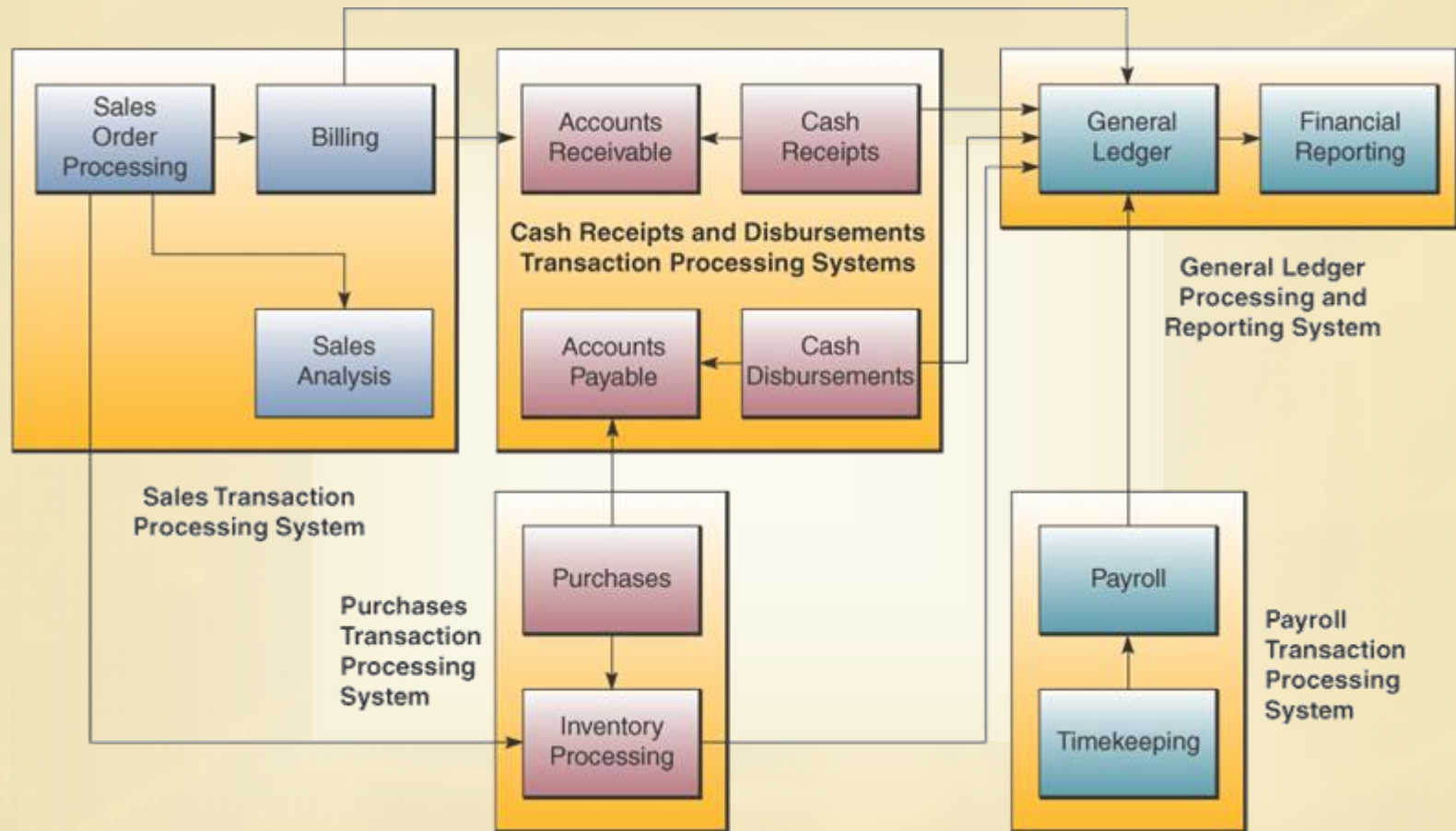
Accounting Information Systems

- The oldest and most widely used information system in business
 - Records and reports business transactions and economic events
 - Produces financial statements
 - Forecasts future conditions

Accounting Information Systems

- Typically consists of
 - Order processing
 - Inventory control
 - Accounts receivable
 - Accounts payable
 - Payroll
 - General ledger systems

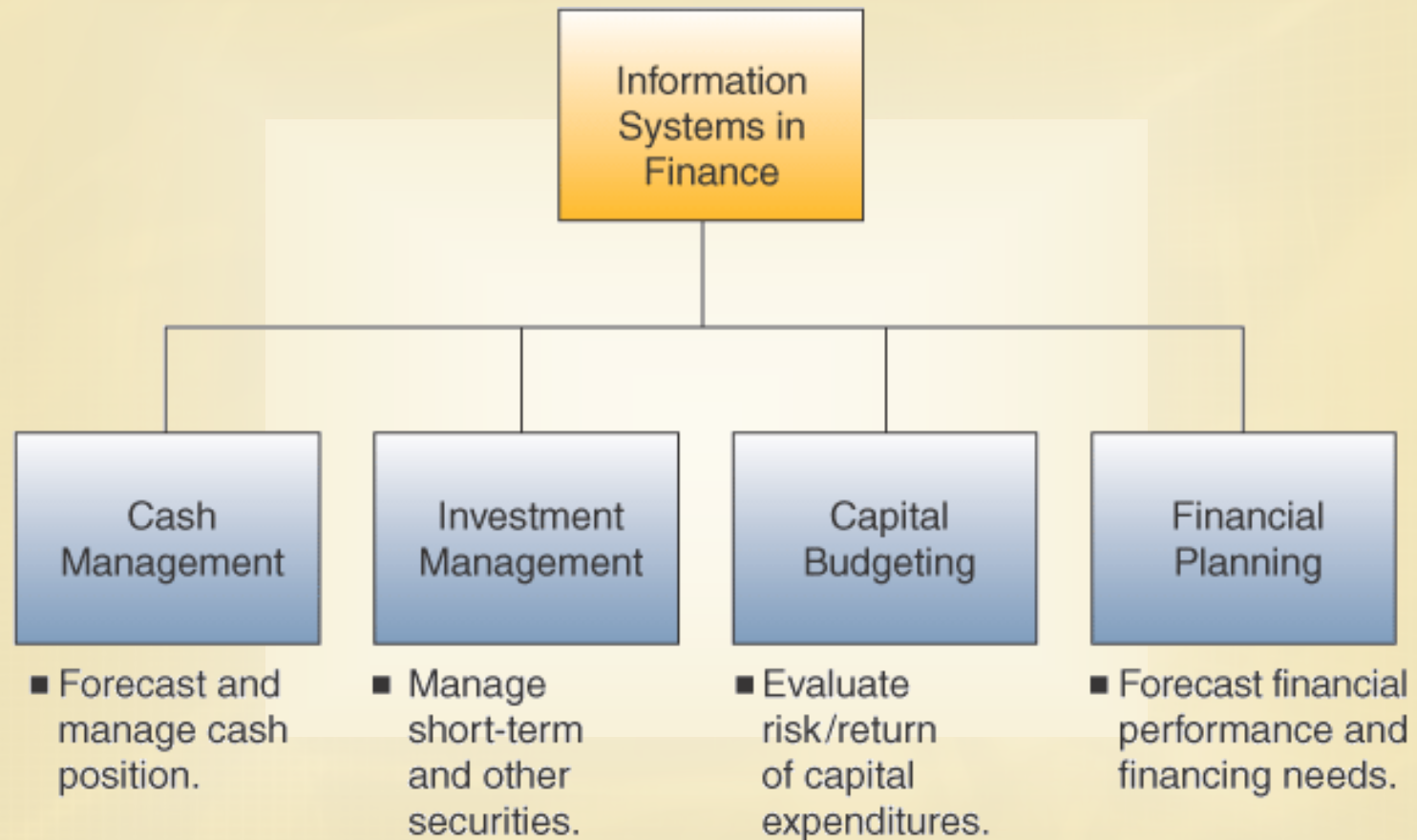
Accounting Information Systems



Financial Management Systems

- Supports business managers and professionals making decisions concerning
 - The financing of a business
 - The allocation and control of financial resources within a business

Financial Management System Example



End Of Chapter

Thank You