Lecture 3 of MIS			
课时	2	教学环境	多媒体教室
Topic	Chapter 2	教材内容	Section 2.1, 2.2, 2.3
Objectives	<ol> <li>Evaluate the role played by the major types of systems in a business and their relationship to each other.</li> <li>Describe the information systems supporting the major business functions: sales and marketing, manufacturing and production, finance and accounting, and human resources.</li> <li>Analyze the relationship between organizations, information systems, and business processes.</li> <li>Explain how enterprise applications promote business process integration and improve organizational performance.</li> </ol>		
Chapter Outline	<ul> <li>2.1. Major Types of Systems in Organizations</li> <li>Different Kinds of Systems</li> <li>Four Major Types of Systems</li> <li>2.2. Systems from a Functional Perspective</li> <li>Sales and Marketing Systems</li> <li>Manufacturing and Production Systems</li> <li>Finance and Accounting Systems</li> <li>Human Resource Systems</li> <li>Integrating Functions and Business Processes: Introduction to Enterprise Applications</li> <li>Business Processes and Information Systems</li> <li>Systems for Enterprise-Wide Process Integration</li> </ul>		
Key Terms	Computer-aided design (CAD), Management information systems (MIS)  Customer relationship management (CRM) systems  Management-level systems, Decision-support systems (DSS)  Manufacturing and production information systems  Enterprise applications, Operational-level systems  Enterprise systems, Portal, Executive support systems (ESS)  Product life cycle management (PLM) systems  Finance and accounting information systems  Sales and marketing information systems  Human resources information systems, Transaction processing systems (TPS)  Strategic-level systems, Interorganizational systems  Supply chain management (SCM) systems, Knowledge management systems		
讲授内容	Section 2.1: Major Types of Systems in Organizations.  This section focuses on defining terms and guides the students through the kinds of information systems. Figure 2-1 is a good tool for facilitating this discussion. Figure 2-2 provides examples of the different types of information systems and the levels supported by these systems.		

## (1) Different Kinds of Systems

Operational-level systems: support operational managers, keeping track of the elementary activities and transactions

Management-level systems: serve the monitoring, controlling, decision-making, and administrative activities

Strategic-level systems: help senior management tackle and address strategic issues

## (2) Four Major Types of Systems

- Transaction Processing Systems (TPS)
- Management Information Systems (MIS)
- Decision Support Systems (DSS)
- Executive Support Systems (ESS)



## (3) Transaction Processing Systems (TPS):

Basic business systems that serve the operational level

A computerized system that performs and records the daily routine transactions necessary to the conduct of the business

#### (4) Management Information System (MIS):

• Inputs: High-volume data

• Processing: Simple models

• Outputs: Summary reports

• Users: Middle managers

## (5) Decision Support System (DSS):

• Inputs: Low-volume data

Processing: Interactive

Outputs: Decision analysis

• Users: Professionals, staff

# (6) Executive Support System (ESS):

Strategic level

Inputs: Aggregate data

• Processing: Interactive

• Outputs: Projections

• Users: Senior managers

## Section 2.2: Systems from a Functional Perspective.

Section 2.2 is central to establishing a sociotechnical approach. Encourage students to understand the need to classify each system in two ways - organizational level and business function. This concept is central to the rest of the text and to their future business life. At the same time, understanding the relationships between the systems

is also critical. Depending upon their previous education and business experience, many students may not know the differences between sales and marketing. Human Resources is a different problem, because it is more of a catchall phrase.

#### (1) Sales and Marketing Systems

Major functions of systems: Sales management, market research, promotion, pricing, new products

Major application systems: Sales order info system, market research system, pricing system

## (2) Manufacturing and Production Systems

Major functions of systems: Scheduling, purchasing, shipping, receiving, engineering, operations

Major application systems: Materials resource planning systems, purchase order control systems, engineering systems, quality control systems

#### (3) Finance and Accounting Systems

Major functions of systems: Budgeting, general ledger, billing, cost accounting Major application systems: General ledger, accounts receivable, accounts payable, budgeting, funds management systems

#### (4) Human Resource Systems

Major functions of systems: Personnel records, benefits, compensation, labor relations, training

Major application systems: Payroll, employee records, benefit systems, career path systems, personnel training systems

## Section 2.3: Integrating Functions and Business Processes:

Introduction to Enterprise Applications. This section discusses enterprise applications, showing how information systems are often used to coordinate activities, decisions, and knowledge across the firm's different levels, functions, and business units. The purposes for these types of systems are to automate the flow of information to manage and improve customer relations, supply chains, and more broadly the coordination of the enterprise internally and with its business partners.

## (1) Business Processes and Information Systems

Business processes: Manner in which work is organized, coordinated, and focused to produce a valuable product or service; Concrete work flows of material, information, and knowledge—sets of activities; Unique ways to coordinate work, information, and knowledge; Ways in which management chooses to coordinate work.

#### (2) Cross-Functional Business Processes

Transcend boundary between sales, marketing, manufacturing, and research and development

Group employees from different functional specialties to a complete piece of work

# (3) Systems for Enterprise-Wide Process Integration

• Enterprise systems

	Supply chain management systems		
	Customer relationship management systems		
	Knowledge management systems		
	Manufacturing and Production  Enterprise System  Buliness process Buliness		
	(4) Zara_case study		
重点	企业信息化的相关内容;企业流程再造、企业信息化		
难点	管理信息系统的概念		
案例分析	Case Study: Can Zara Keep up with Speed Chic? (in Text)		
习题	Exercise - chapter 2		
课后阅读材料	Bank TPS for Swapping Currency		
	http://www.informationweek.com/story/IWK20020913S0025		
	Business Transactions in Real Time,		
	http://www.informationweek.com/story/IWK20020913S0011		