**E-business**

- **E-business**: the use of IT, Internet and networks to support e-commerce, e-communications and collaboration.
- **e-commerce**

**E-Business**

- E-Business concepts include:
  1. Cross-functional enterprise systems
  2. Functional enterprise systems

**Cross Functional Enterprise applications of e-business**

- Systems that cross the boundaries of traditional business functions

**Cross Functional Enterprise systems of e-business**

- Companies moved from *legacy* systems to *client-server* systems.

**Cross-functional enterprise systems**

- *cross-functional software* include:
  - ERP – Enterprise Resource Planning
  - SCM – Supply Chain Management
  - CRM – Customer Relationship Management
Enterprise Application Architecture

- Why is it like this? Why does it not look like a traditional architecture (Accounting, Finance, Operations, HR, Marketing)
- Example: Returning unsold goods for credit

Example
- No single department is responsible
- Returned goods end up lost in the warehouse
- Retailers don’t get the credit

Example
- Manufacturer often can’t trace what really happened

Example
- RESULT: Unhappy retailers

Cross Functional Enterprise systems of e-business
**ERP – Enterprise Resource Planning**

- is the backbone of e-business
- Definition – ERP is a cross-functional enterprise system that integrates and automates internal business processes.

**ERP – Enterprise Resource Planning**

- ERP concentrates on the efficiency of a firm’s internal production, distribution, and financial processes.

**Cross Functional Enterprise systems of e-business**

![Cross Functional Enterprise systems diagram]

**CRM – Customer Relationship Management**

- helps companies become customer focused
- Definition – CRM uses IT to integrate customer serving processes in sales, marketing, and customer services.

**CRM supports Sales**

- Provides customer with product information, product configuration, and sales quote generation.

**CRM supports Customer Service**

- Helps Customer Service Managers create assign and manage requests for service by customers.
**CRM – Why is Retention Important?**

- Cost 6 times more to sell to a new customer than to an existing one
- Dissatisfied customers tell on average 9 people about bad experience
- If customer increases retention by 5% it can boost profits by 85%
- Odds of selling to a new customer is 15% and to an existing customer 50%
- 70% of upset customers will do business again if problem is quickly fixed

**Cross Functional Enterprise systems of e-business**

**SCM – Supply Chain Management**

- Supply Chain – the facilities, functions, and activities involved in producing and delivering a product or service from suppliers (and their suppliers) to customers (and their customers)

- SCM – manages the flow of information through the supply chain

**SCM – Supply Chain Management**

- Helps get the
  - right products
  - to the right place
  - at the right time
  - in the proper quantity
  - at an acceptable cost.

**SCM – Supply Chain Management**

- TaylorMade Golf use of SCM
  - Spent 2 years moving key business IS with its network of suppliers and distributors to the Web
  - TaylorMade spent $10 million on SCM system
  - Projected savings of $50 million
  - Custom clubs now made in less than 7 days vs. 6 weeks.
  - Custom clubs have doubled in the past year.
**Cross Functional Enterprise systems of e-business**

- Suppliers
- Supply Chain Management
- Internal Business Processes
- Customer Relationship Management
- Marketing – Sales – Service
- Customers

**Partner Relationship Management - PRM**

- PRM aims at acquiring and retaining partners who can enhance the selling and distribution of a firm’s products and services

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**Cross Functional Enterprise systems of e-business**

- Suppliers
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**Understanding IT in your field**

- Should have some understanding on how IS affects your field or industry:
  - Fields:
    - Marketing
    - Human Resources Management
    - Accounting
    - Finance
    - Production/Operations

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**Functional Business Systems**

- Marketing
  - Customer relationship management
  - Interactive marketing
  - Sales force automation
- Human Resource Management
  - Compensation analysis
- Production Operations
  - Manufacturing resource planning
  - Production planning
  - Inventory control
- Accounting
  - Order processing
  - Accounts receivable
  - Accounts payable
  - General ledger
- Finance
  - Cash management
  - Financial forecasting

**Marketing IS**

- provide IT that support Marketing
- Interactive marketing or customer focused marketing: creating, marketing, purchasing and improving products and services through Web sites.
Marketing IS

– Targeted marketing: important tool in developing advertising strategies:

  - Community – customize advertising to appeal to people of specific virtual communities
  - Content – advertising placed on a variety of selected websites aimed at a specific audience

Marketing IS

– Targeted marketing:
  - Context – advertising placed on web pages that are relevant to the content of a product or service

Marketing IS

– Targeted marketing:
  - Demographic/Psychographic – web marketing efforts aimed at specific types or classes or people
  - Online Behavior – promotion efforts tailored to each visit to a site by an individual, e.g., using cookies files

Manufacturing IS

- Support POM function
  - Planning and control of process of producing goods and/or services
  - Plan, monitor, and control
    - inventories
    - purchases
    - flow of goods

Manufacturing IS

- monitors and controls flows of materials, products and services through the organization
Manufacturing IS Objectives

• produce the final product at the highest quality possible
• produce the final product at the lowest possible cost
• deliver the required amount of products
• make the delivery on time

Manufacturing IS Subsystems

• Master production scheduling - provides detailed plans for both the short-term and long-range scheduling of manufacturing facilities.

Manufacturing IS Subsystems

• Inventory control - Software - attempts to determine
  – How much to order
  – When to order

Manufacturing IS Subsystems

• Just-in-time (JIT) inventory delivers inventory and materials just before they are used in a product.
• CAD - Computer Aided Design

Manufacturing IS Subsystems

• Flexible manufacturing system (FMS) - an approach that allows manufacturing facilities to rapidly and efficiently change from making one product to another.

Manufacturing IS

• Quality Control

• MRP
A Human Resources IS

- Concerned with activities related to workers, clerks, managers, and other individuals employed by the organization.

Human Resources IS

- Staffing

- Training and Development

- Compensation

- Governmental reporting

Human Resources IS

- Compensation

Accounting IS

- Order Processing
- Accounts Receivable
- Accounts Payable
- Payroll
- General Ledger

A Finance IS

- The IS assist in providing financial information to all financial managers within an organization, including:
  - Forecast and cash management
  - Manage short term securities
A Finance IS

- Evaluate risk/return of capital expenditures
- Forecast financial performance