Information Systems for Business Operations

MBA 8125 – Week 1

Sources:
Laudon & Laudon (2006)
Straub (2002)

Outline

- Why Study IT?
- Information Systems Basics
- e-Commerce
- Management Challenges
Reasons to Care about IT

- Capital Management
  - Organizations make large investments in IT
- Foundation of Doing Business
  - The goals of a firm can be achieved or hindered by choices made regarding IT
- Productivity
  - Firms using IT wisely can achieve productivity gains
- Strategic Opportunity and Advantages
  - IT is helpful to identify opportunities for strategic advantage

Interdependence between Organizations and Information Systems

Figure 1.2
(Laudon & Laudon 2006)
Management Tool: The Leavitt Diamond

- Organizational Objectives
- Technology
- Management Processes
- Roles, People, Skills
- Organizational Structure

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Functions of an Information System

![Diagram of information system functions]

Figure 1.6 (Laudon & Laudon 2006)

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Types of Information Systems

![Diagram of types of information systems]

Figure 2.2 (Laudon and Laudon 2006)
Anthony Triangle

Strategic planning
Knowledge workers
Managerial planning & control
Knowledge workers
Operational control
Transaction systems

EIS, ESS Competitiveness
Unstructured information
OLAP, DW, DM

Effectiveness
MSS, ES
Semi-structured information
DSS, GDSS, MSS, ES, OA

Efficiency
MRS
Structured information
TPS, OLTP, EDP, ADP

Critical Information Systems for Today’s Business Practices

- Enterprise Systems (ERP)
  - Coordinates processes of the firm
- Supply Chain Management Systems (SCM)
  - Automates relationships with suppliers for planning, sourcing, manufacturing, and delivery of products and services
- Customer relationship management (CRM)
  - Develops coherent, integrated view of relationships with customers
- Knowledge Management Systems (KMS)
  - Create, capture, store, and disseminate firm expertise and knowledge
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- **e-Commerce**
- Management Challenges

Electronic Commerce

- Buying and selling of goods and services electronically
- Benefits
  - Internet links buyers, sellers
  - Lowers transaction costs
  - Goods and services can be advertised, bought, and exchanged worldwide
Categories of Electronic Commerce

- Business-to-Consumer (B2C)
  - Retailing of products and services directly to individual customers
- Business-to-Business (B2B)
  - Sales of goods and services among businesses
- Consumer-to-Consumer (C2C)
  - Individuals use web for private sales or exchange

Why do Organizations Invest in e-Commerce?

- Digitization of Products
- Inexpensive Telecommunications
- Widespread Diffusion of Computers
- Increased Pressure on Costs and Margins
- Changing Organizational Models
- Rapidly Shrinking Cycle Times
- Intelligent Products and Services
- Demand for Mass Customization
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Management Challenges

- Business Environment Challenges
- Technology Challenges
Business Models

- Defines an enterprise
- Describes how an enterprise delivers products or services
- Shows how the enterprise creates wealth

Internet Business Models

- **Virtual Storefront**: Sells goods, services
- **Information Broker**: Provides information on products, pricing, etc.
- **Transaction Broker**: Provides rates, terms from various sources
- **Online Marketplace**: Enables buyers and sellers to meet
- **Content Provider**: Creates revenue by providing client content for a fee and by advertising revenues
- **Online Service Provider**: Provides service, support for individuals and business
- **Virtual Community**: Chat room, online meeting place
- **Portal**: Initial point of entry to specialized content, services on the web
Management Challenges: Business Environment

- Finding a Successful Business Model
- Organizational Change Challenges
- Trust, Security and Privacy

Management Challenges: Information Systems

- **Investment**: Obtaining Business Value from Information Systems
- **Strategic Choices**: Determining Necessary Assets to Ensure Effective Use of Technology
- **Globalization**: Understanding Business and System Requirements of a Global Economic Environment
- **Infrastructure**: Supporting Goals in Rapidly Changing Environments
- **Ethics and Security**: Ensuring Systems Are Used in an Ethical and Socially Responsible Manner
Some Questions to Think About…

- How do we manage IT as a ubiquitous resource?
- How do we understand the role of information technology in the firm?
- How do firms adapt to changes in technology?
- What, in general, are the challenges and risks of information technology management?