Business and Information Systems

David W. Gerbing

School of Business Administration
Portland State University

- Information Systems in Business
  - Introduction
  - Modern Role of IS

Introduction
Why pursue a business career?

- **Purpose of business**
  - Make people happy: **Satisfy the needs** and wants of customers
  - so as to **make a profit**
  - by **providing the product**: materials, services, information
  - to which the business has **added value**

---

Greed: Focus on individual gain, obtaining more than is needed, without regard to the needs of others

- In a competitive market, greed is mitigated by the voluntary nature of the transactions so that the consumer may choose among competitors
- Unlike government, a business is unable to compel the customer to do anything
- Instead, the business must convince the customer that the product offers superior value to satisfy his or her need
- **Value**: Assessed in terms of low cost and high quality
- Expressing **greed** by charging prices that are too high and/or providing lower quality ultimately leads to business failure in a competitive market
Information Systems

What is an information system?

- **Information System**: An organized collection of digital devices – computers, network, computer programs, printers, perhaps the phone system, etc. – that collects, processes and disseminates information
- IS is the digital nervous system of a company

Business Processes

The activities of a business

- **Business process**: A step-by-step procedure for accomplishing a specific goal
- Some processes are for internal customers, that is, for other employees of the company as they do their jobs
- Example: Compute payroll
- Ultimately, processes are for external customers, the people or businesses who purchase the company’s products
- Example: Take a customer’s order

Modern Role of IS
Information Systems in Business

From the Beginning: Automate existing business processes

▶ Improved accuracy
▶ Improved speed

Create new processes possible only with IS

▶ The role of IS within the company is evolving from doing a better job of what was always done to doing new things never before possible
▶ Modern IS makes possible both efficiencies of scale and increased focus on the customer

Mass Customization: Example of a New Business Process

Only possible with modern IT

▶ Before 1900’s: Individual, customized production
  ◦ Cost is high
  ◦ Part replacement not standardized
▶ During 1900’s: Mass production, the assembly line
  ◦ Complete standardization (any color as long as its black)
  ◦ Much lower cost
▶ Mass Customization: Assembly line manufacturing of individually customized items
  ◦ Enjoy the benefits of economy of scale
  ◦ Enjoy the benefits of customization

Information Technology and Management

Emergence of information technology in modern business

▶ In the old days, before the 90’s, information systems employees tended to be “geeks” who ran the company mainframe computer
▶ Today, the creation of new business processes made possible by this technology has redefined the role of IS
▶ Chief Information Officer or CIO: The head of IS, who contributes to the strategic initiatives of the entire company
Skills Sought by Employers

What sells

- Technical knowledge
- Business knowledge
- Communication/people skills

The End