The iPad is Apple’s latest gadget.
Globalization: 1.0, 2.0, 3.0

The World is Flat

Key Factors Enabling Globalization 3.0

1. November 9, 1989—The Fall of the Berlin Wall
2. August 9, 1995—Release of Netscape Web Browser
3. Work Flow Software
4. Uploading
5. Outsourcing
6. Offshoring
7. Supply Chaining
8. In-Sourcing
9. In-Forming
10. The Steroids

Triple convergence:
1. Enablers work together, enhancing collaboration
2. Move from vertical to horizontal collaboration
3. Inclusion of China, India, and Soviet Union

Learning Objectives

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5. Describe how computer ethics impact the use of information systems and discuss the ethical conundrum associated with information privacy, accuracy, property, and accessibility.

Data: A key component of information systems
Careers in IS: Evolution of the CIO

The CIO Today

People: The Builders and Managers of IS

- Career opportunities are strong and expected to grow.
  - U.S. Bureau of Labor Statistics: Employment for computer and IS managers will grow faster than the average for all occupations through 2016.
  - Median annual earnings of IS managers in May 2009 were $113,720.
  - Starting salary offers for IS majors, with one year or less of experience, averaged $54,038.
  - Some titles: systems analysts, systems programmers, systems operators, network administrators, database administrators, systems designers, systems managers, and chief information officers

Best Jobs for the Next Decade

<table>
<thead>
<tr>
<th>Rank</th>
<th>Career</th>
<th>Job Growth (10-year forecast)</th>
<th>Median Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Systems engineer</td>
<td>41%</td>
<td>$87,700</td>
</tr>
<tr>
<td>2</td>
<td>Physician assistant</td>
<td>27%</td>
<td>$80,900</td>
</tr>
<tr>
<td>3</td>
<td>College professor</td>
<td>21%</td>
<td>$75,400</td>
</tr>
<tr>
<td>4</td>
<td>Nurse practitioner</td>
<td>23%</td>
<td>$85,200</td>
</tr>
<tr>
<td>5</td>
<td>IT project manager</td>
<td>16%</td>
<td>$88,700</td>
</tr>
<tr>
<td>6</td>
<td>Certified public accountant</td>
<td>18%</td>
<td>$74,200</td>
</tr>
<tr>
<td>7</td>
<td>Physical therapist</td>
<td>27%</td>
<td>$74,300</td>
</tr>
<tr>
<td>8</td>
<td>Computer/network security consultant</td>
<td>27%</td>
<td>$99,700</td>
</tr>
<tr>
<td>9</td>
<td>Intelligence analyst</td>
<td>15%</td>
<td>$82,500</td>
</tr>
<tr>
<td>10</td>
<td>Sales director</td>
<td>20%</td>
<td>$140,000</td>
</tr>
</tbody>
</table>

Source: based on http://money.cnn.com/magazines/moneymoney/money300/

IS Management Job Titles and Job Descriptions

IS Professional Core Competencies

- Technical competency
- Business competency
- Systems competency
Organizations: The Context of IS

- Organizations use information systems to:
  - be more productive and profitable
  - gain competitive advantage
  - reach more customers
  - improve service to their customers

- True for all types of organizations
  - Professional
  - Social
  - Religious
  - Educational
  - Governmental

Types of Info Systems Used in Organizations

<table>
<thead>
<tr>
<th>Type of System</th>
<th>Purpose</th>
<th>Sample Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge management system</td>
<td>Collects and processes data on students, courses, and enrollment</td>
<td>Knowledge portal</td>
</tr>
<tr>
<td>Geographical information system</td>
<td>Create, store, analyze, and manage spatial data</td>
<td>Site selection for new campus</td>
</tr>
<tr>
<td>Functional area information system</td>
<td>Support the activities within a specific functional area of the firm</td>
<td>System for planning personnel training and work assignments</td>
</tr>
<tr>
<td>Customer relationship management system</td>
<td>Support interaction between the firm and its customers</td>
<td>Salesforce automation</td>
</tr>
<tr>
<td>Enterprise resource planning</td>
<td>Support and integrate all forms of business, including production, sales, marketing, and service</td>
<td>Financial, operations, and human resource management</td>
</tr>
<tr>
<td>Supply chain management system</td>
<td>Support the coordination of suppliers, product, or service production, and distribution</td>
<td>Procurement planning</td>
</tr>
<tr>
<td>Electronic commerce system</td>
<td>Enable consumers to buy goods and services from Firm's Web site</td>
<td>Amazon.com</td>
</tr>
</tbody>
</table>
Organizing the IS Function

- Early History: Poor Service and Worse Attitudes
- The Rise and Fall of End-User Development
- The Modern Information Systems Organization

The Spread of Technology in Organizations

- IS personnel tend to spend most of their time out in the business unit.
- IS personnel often have dual-reporting relationships—reporting to both the central IS group and the business function they serve.
- Clearly a need for people who know the technology side and the business side of the business

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The Dual Nature of IS

- IS can help you or hurt you.
- Toyota Prius—The failure (with redemption)
  - Braking system software glitch
  - Severely blemished Toyota’s reputation for safety and quality
  - Fortunately, dealerships could easily install new software to fix the problem
- FedEx—The success
  - $32 billion family of companies—largest express transportation company
  - Information hub for business where managing information is the business

IS for Competitive Advantage

- Both FedEx and Toyota were developing strategic information systems.
- Purpose of strategic information systems is to help gain or sustain competitive advantage.
- More about using IS for strategic advantage is discussed in Chapter 2.

Why Information Systems Matter

- Nicholas Carr article—"IT Doesn’t Matter"
  - IT is no longer a source of advantage on the firm level.
  - Companies should focus IT on cost reduction and risk mitigation.
- Many experts disagree with his arguments
  - Abbie Lundberg—Interview with Carr
  - Don Tapscott—"The Engine That Drives Success: The Best Companies Have the Best Business Models Because They Have the Best IT Strategies"
  - Many successful companies use IT to support a unique business strategy.
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Computer Ethics

- What are computer ethics?

Information Privacy

- What information should you have to reveal?
- What information you might want to keep private?
- What is identity theft?

Information Privacy (cont’d)

- Companies seem to know about our every move—how much information do we need to reveal?
- Amazon.com is famous for personalization
- What are the costs?

How to Maintain Your Privacy Online

- Review the privacy policy of the company with which you are transacting.
- The policy should indicate:
  - What information is being gathered about you.
  - How the seller will use this information.
  - Whether and how you can "opt out" of these practices.
- Additional tips:
  - Choose Web sites monitored by independent organizations.
  - Avoid having cookies left on your machine.
  - Visit sites anonymously.
  - Use caution when requesting confirmation e-mail.

Information Accuracy

- Who is responsible for ensuring the authenticity and fidelity of information?
Information Property

- Who owns information about individuals?
- How can this information be sold and exchanged?

Data Privacy Statements

- Company maintaining the database with customer information legally owns it
  - Is free to sell it?
  - Must it ensure proper data handling practices?
- Social networking complicates matters
  - Complexity of privacy settings
  - Friends can tag you without your knowledge.

Information Accessibility

- Who has the right to monitor the information?

Need for a Code of Ethical Conduct

- Issues: changing photographs, using school computers for personal use, compiling information about shopping patterns and credit history
- Many businesses have guidelines for appropriate use.
- Universities endorse guidelines proposed by EduCom.

Need for a Code of Ethical Conduct (cont’d)

Responsible computer use (based on work of the Computer Ethics Institute) prohibits:
1. Using a computer to harm others
2. Interfering with other people’s computer work
3. Snooping in other people’s files
4. Using a computer to steal
5. Using a computer to bear false witness
6. Copying or using proprietary software without paying for it
7. Using other people’s computer resources without authorization
8. Appropriating other people’s intellectual output

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