Chapter 1: Why Study Information Security?
Growing IT Security Importance and New Career Opportunities

- Increased services to both vendors and employees create worlds of possibilities in satisfying customer needs, but …
- they also create risks to the **confidentiality, integrity, and availability** of confidential or sensitive data
Increasing Demand by Government and Private Industry

- Higher demand for expertly trained individuals
  - U.S. Bureau of Labor Statistics
    - The security of computer networks will continue to increase in importance as more business is conducted over the Internet
    - Source: www.collegegrad.com/careers/manage30.shtml
  - Computerworld expects security pay to continue to outperform the market
    - Source: www.computerworld.com/careertopics/careers/story/0,10801,73893,00.html
Becoming an Information Security Specialist

- Get the right certification - Such as:
  - Certified Information Systems Security Professional (CISSP)
  - Cisco Certified Security Professional
  - Global Information Assurance Certification (GIAC): [www.giac.org](http://www.giac.org)

- Increase your disaster recovery and risk management skills
- Get on a project working with strategic partners
- Consider an internship in IS
Schools Are Responding to Demands

- Hundreds of community colleges, four-year universities, and post-graduate programs are offering degrees and certificates in emergency preparedness, counterterrorism, and security
  - The National Security Agency Centers of Academic Excellence
    - www.nsa.gov/ia/academia/caeiae.cfm
Multidisciplinary Approach

- Exposure to nontechnical areas gives INFOSEC professionals a greater ability to address and resolve the complex problems
  - Including probability and statistics, psychology, English, foreign languages, philosophy, ethics, history and so on
- A wide range of educational experiences is a good foundation for an INFOSEC career
Contextualizing Information Security

- Information security draws upon the best practices and experiences from multiple domains
Contextualizing Information Security (cont.)

- A view of a typical structure and context showing where INFOSEC fits within a typical large corporation
Information Security Careers Meet the Needs of Business

- To support large business operations a number of common positions and career opportunities are needed
  - Security administrators
  - Access coordinators
  - Security architects and network engineers
  - Security consultants
Information Security Careers Meet the Needs of Business cont.

- Security testers
- Policymakers and standards developers
- Compliance officers
- Incident response team members
- Governance and vendor managers
Summary

- The risks posed to networked systems remain vulnerable to attacks from within and without an organization.
- The explosive growth of e-commerce and the pervasive personal and business uses of the Internet have created a growing demand for INFOSEC specialists.
- The principles, approaches, and concepts in INFOSEC should work together to provide the harmonious mix of risk and reward that modern business demands.
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