CHAPTER 1

Introduction to Information Systems

1. Why Should I Study Information Systems?
2. Overview of Computer-Based Information Systems
3. How Does IT Impact Organizations?
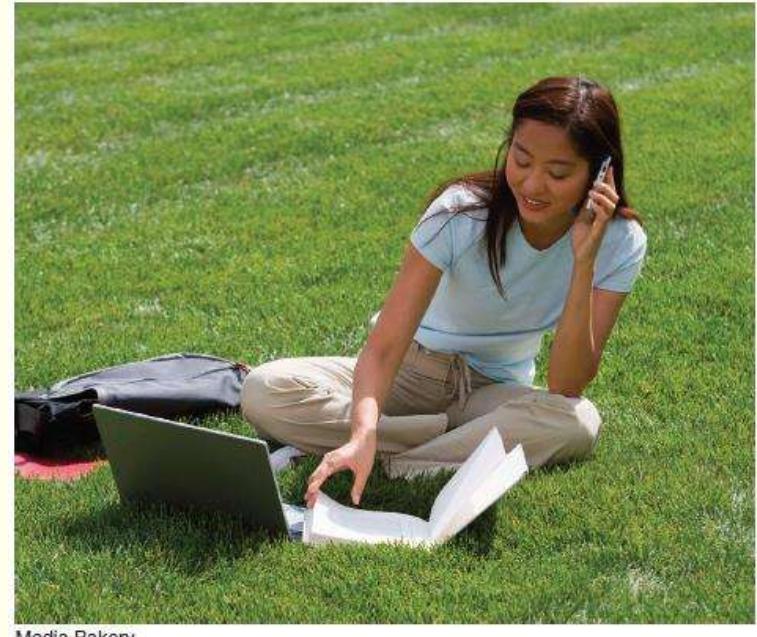4. Importance of Information Systems to Society

>>>

1. Identify the reasons why being an informed user of information systems is important in today's world.

2. Describe the various types of computer-based information systems in an organization.

3. Discuss ways in which information technology can affect managers and non-managerial workers.

>>>

4. Identify positive and negative societal effects of the increased use of information technology.

1.1 Why Should I Study Information Systems

- The Informed User – You!
- IT Offers Career Opportunities
- Managing Information Resources

Media Bakery

Reasons Why You Should Be An Informed User…

1. You will benefit more from your organization's IT applications because you will understand what is "behind" those applications.
2. Your input can enhance your organization's IT applications.
3. As you enter the workforce you can assist in selecting the IT applications your organization will use.

Reasons Why You Should Be An Informed User (con't)…

4. You will aware of both new information technologies and rapid developments in existing technologies.

5. You will understand how using IT can improve your organization's performance.

6. If you are entrepreneurial minded, you can use IT to start your own business.

IT Offers Career Opportunities

© shironosov/iStockphoto

- Chief Information Officer (CIO)
- Substantial Demand for IT Staff
  – Programmers
  – Business Analysts
  – System Analysts
  – Designers
- $115,000 is the median salary for IS Managers (US Dept of Labor)

Managing Information Resources

- Managing information systems (IS) is difficult and complex
- Contributing Factors:
  - Strategic value of IS's
  - Acquiring, operating, and maintaining IS's is very expensive
  - Evolution of the IS Function

IT'S ABOUT Using I.S.

- **Information Technology Supports Students in Computer Department**

1. Describe how VESIT Computer Department manages its information resources to provide information to students.

2. What are the advantages of central management of information systems in Department.

3. What are the disadvantages of central management of information systems in the Department?

1.2 Overview of Computer-Based IS's

- Data – Information – Knowledge
- Computer-Based Information System (CBIS)
- Types of Computer-Based Information Systems (CBIS)

Data – Information – Knowledge

© creischl/iStockphoto

Data

Exactostock/SuperStock

Information

© TPopova/iStockphoto

Knowledge

Data versus Information versus Knowledge
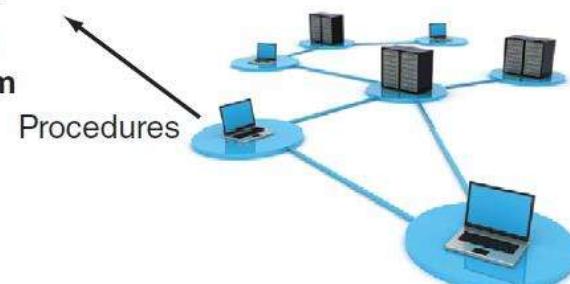

Hardware
© Dzianis/iStockphoto

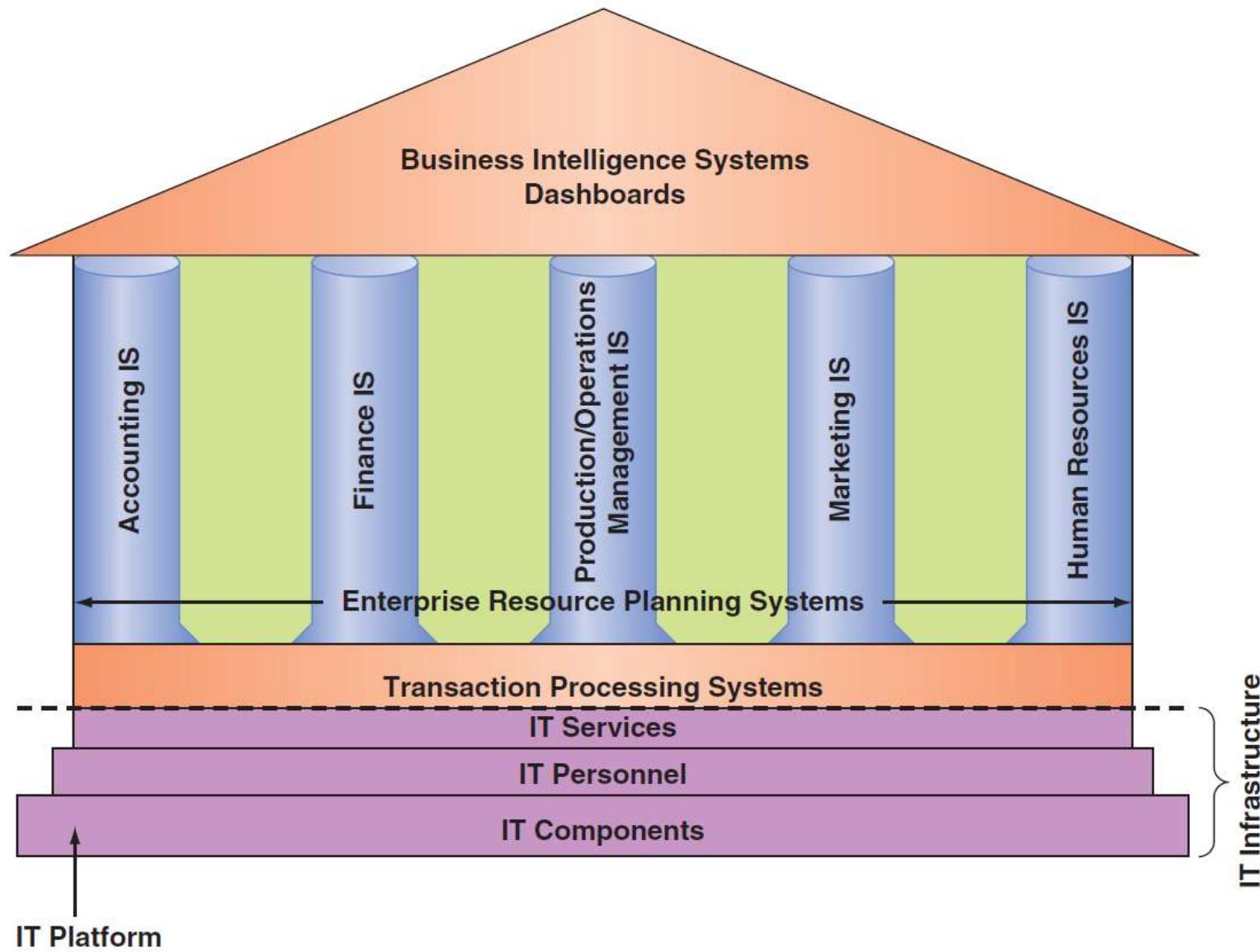Procedures

Procedures

Database
© Alex Slobodkin/iStockphoto

© Blend_Images / iStockphoto

Computer-based
information system

Procedures

Procedures

Software
© Oleksiy Mark/iStockphoto

Network
© alexsl/iStockphoto

Computer-Based Information Systems (CBIS)

Business Intelligence Systems
Dashboards

Accounting IS

Finance IS

Production/Operations Management IS

Marketing IS

Human Resources IS

Enterprise Resource Planning Systems

Transaction Processing Systems

IT Services

IT Personnel

IT Components

IT Infrastructure

IT Platform

Components of a CBIS

- Hardware
- Software
- Database
- Network
- Procedures
- People

Types of Computer Based Information Systems (CBIS)

- Breadth of Support for Information Systems (IS)
- Support for Organizational Employees

Breadth of Support for Information Systems (IS)

- Functional Area Information Systems (FAIS)
- Enterprise Resource Planning Systems (ERP)
- Transaction Processing Systems (TPS)
- Interorganizational Information Systems (IOS)
- E-Commerce Systems

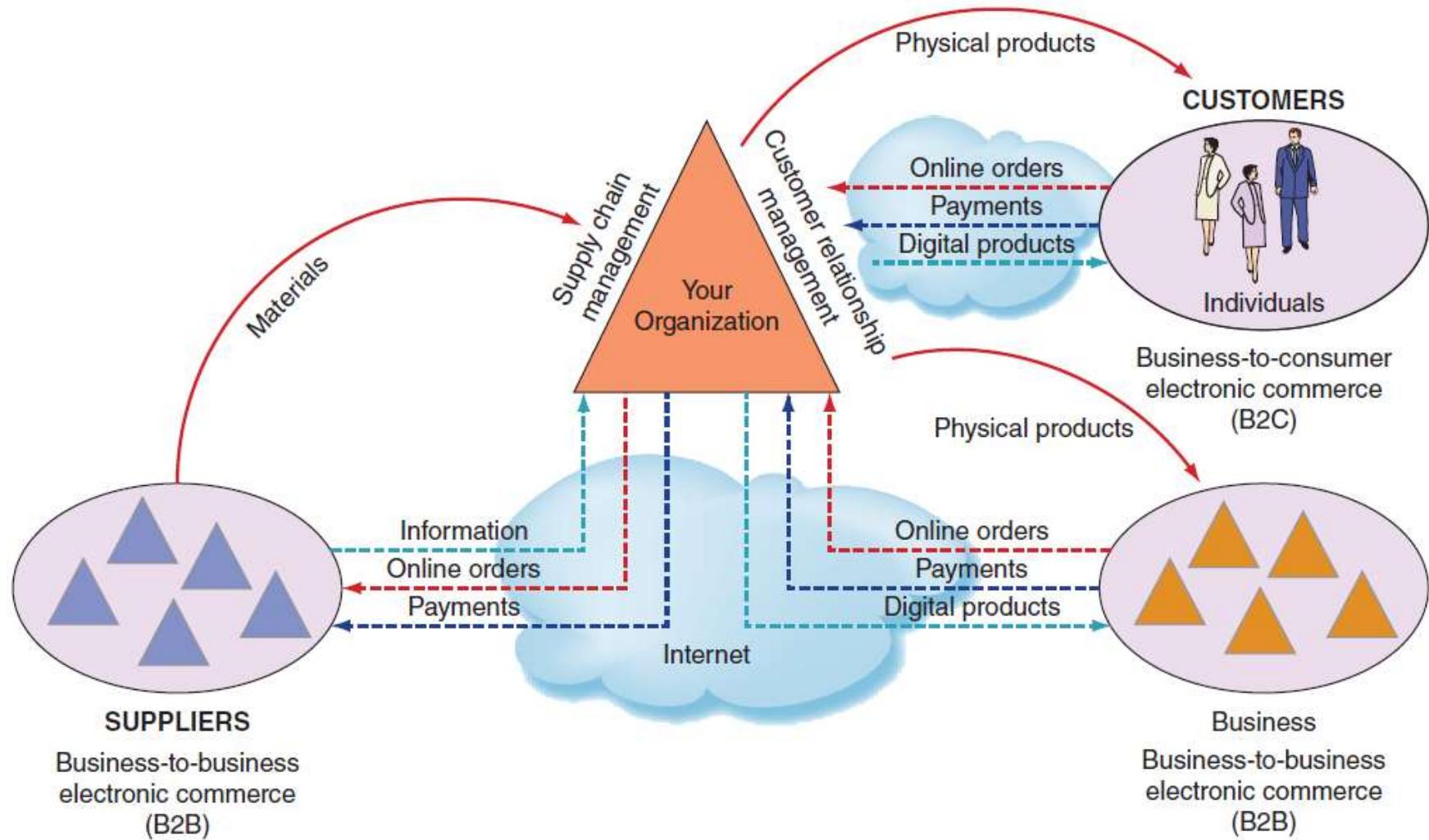# Figure 1.5: IS that function among multiple organizations

Figure 1.5 Information systems that function among multiple organizations.

Support for Organizational Employees

- Knowledge Workers
- Office Automation Systems (OASs)
- Business Intelligence (BI) Systems
- Expert Systems (ES)
- Dashboards

1.3 How Does IT Impact Organizations?

- IT Reduces the Number of Middle Managers
- IT Change's the Manager's Job
- Will IT Eliminate Jobs?
- IT Impacts Employees at Work

IT Impacts Employees at Work

- IT Impacts Employees' Health and Safety
- IT Provides Opportunities for People with Disabilities

Figure 1.6: Ergonomic products protect computer users.

Media Bakery

(a)

Media Bakery

(b)

Media Bakery

(c)

Media Bakery

(d)

1.4 Importance of IS to Society

- IT Affects Our Quality of Life
- The Robot Revolution is Here Now
- Improvements in Healthcare

IT'S ABOUT Self study

- ## **Different Types of Robots**
    1. Discuss some disadvantages of (a) telepresence robots, (b) autonomous cars, and (c) drones.
    2. Would you be willing to ride in an autonomous car? Why or why not?
    3. Which occupations are most at risk from a widespread adoption of autonomous cars? Support your answer.
    4. Debate the privacy issues associated with domestic use of drones by law enforcement agencies.
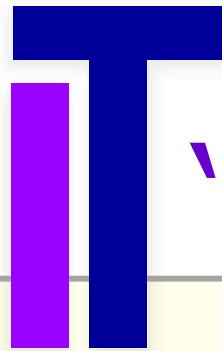
IT'S ABOUT BUSINESS 1.3

- **Getting Kids in Shape**

  1. Why is Zamzee using games to help kids lose weight?

  2. In your opinion, would Zamzee be as successful for adult weight loss? Why or why not?

© monkeybusinessimages/iStockphoto

IT's About Sign OFF

- **You are requested to see the google classroom for submission of class Assignemnts.**

- **Answers should be short.**

- **Not more than 2 Pages,**

- **You can express with diagrams, Do not Copy your responses.**