Learning Objectives

Upon completion of this unit, students should be able to:

1. Describe e-learning, virtual universities, and e-training.
2. Distinguish between wikis and blogging.
3. Explain knowledge management and dissemination as an e-business.
4. Analyze the mobile computing environment that supports m-commerce (devices, software, services).
5. Describe the four major types of wireless telecommunications networks.
6. Discuss the value-added attributes, benefits, and fundamental drivers of m-commerce.
7. Identify the B2B and supply chain management applications of m-commerce.
8. Distinguish the key characteristics and current uses of pervasive computing.

Unit Summary

The functioning of interconnected organization of thousands of networks and millions of computers linking businesses, educational institutions, government agencies, and individuals as they pertain to e-commerce are discussed in this unit. For example, business managers need to understand technological concepts such as packet switching, routers and routing algorithms, protocols, transmission control protocol/internet protocol (TCP/IP), and client/server computing. By understanding how the Internet works, the business manager of the future will be able to capitalize on Internet strategies to achieve business objectives.

Students will understand the origins of the Internet. The Internet has evolved over three stages: Innovation (1961-1974), Institutionalization (1975-1995), and Commercialization (1995 to the present).

Students will be able to differentiate protocols and utility programs of the Internet. The student will explore concepts such as server, hypertext transfer protocol (HTTP), simple mail transfer protocol (SMTP), post office protocol 3 (POP3), internet message access protocol (IMAP), file transfer protocol (FTP), telnet, and a secure sockets layer (SSL). These technological features secure communications between the client and business.

Important to understanding structural composition of the Internet, the student will contrast and compare Internet exchange point (IXP), campus area network (CAN), and an internet service provider (ISP). All three create the backbone for the Internet. They are the nidus where local and regional networks intersect and connect.

Key Terms

1. 1G
2. 802.11b
3. 802.11a
4. Automatic crash notification
5. Blackberry
6. Blog
7. Bluetooth
8. Compact Hypertext Markup Language (cHTML)
9. Distance learning
10. Electronic Product Code
11. Expert location systems
12. Knowledge management
13. Podcast
14. Webcasting
15. Webinars

Reading Assignment

Chapter 8: Innovative EC Systems: E-Government to E-Learning to C2C
Chapter 9: Mobile Computing and Commerce and Pervasive Computing

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Chapter 8: Innovative EC Systems: E-Government to E-Learning to C2C
Chapter 9: Mobile Computing and Commerce and Pervasive Computing
Students will be able to explain the limitations of today’s Internet. Today’s Internet has a number of limitations: limited bandwidth to the home; there is no guaranteed level of service; the network architecture is not optimized for delivery of rich media materials such as video; and HTML is limited in its ability to describe rich documents.

Recent improvement in technologies include: advanced network architecture, new networking capabilities, improved middle ware, and more advanced applications that incorporate video and audio. These improvements will make possible feature film distribution to millions of viewers, differentiated quality of service, guaranteed service levels, and lower error rates.