

## NETWORK COMPUTING

► **What caused the sudden upswing in computer ownership during the 1990s?** The third phase of the digital revolution materialized as computers became networked and when the Internet was opened to public use. A **computer network** is a group of computers linked together to share data and resources.

Network technology existed before the Internet became popular, but those networks were mainly deployed to connect computers within a school or business. Networks were complicated to set up and unreliable. As the third phase of the digital revolution unfolded, network technology became consumer-friendly, allowing homeowners to connect multiple computers, exchange files, and, most importantly, share an Internet connection.

The **Internet** is a global computer network originally developed as a military project, and was then handed over to the National Science Foundation for research and academic use. When restrictions on commercial use of the Internet were lifted in 1995, companies such as AOL and CompuServe became popular services for access to e-mail and the World Wide Web. Internet access was a major factor contributing to the upswing in computer ownership during the 1990s.

► **What about the Web?** When historians look back on the digital revolution, they are certain to identify the Web as a major transformative influence. The **Web** (short for *World Wide Web*) is a collection of linked documents, graphics, and sounds that can be accessed over the Internet.

A key aspect of the Web is that it adds content and substance to the Internet. Without the Web, the Internet would be like a library without any books or a railroad without any trains. Online storefronts, auction sites, news, sports, travel reservations, and music downloads made the Web a compelling digital technology for just about everyone.

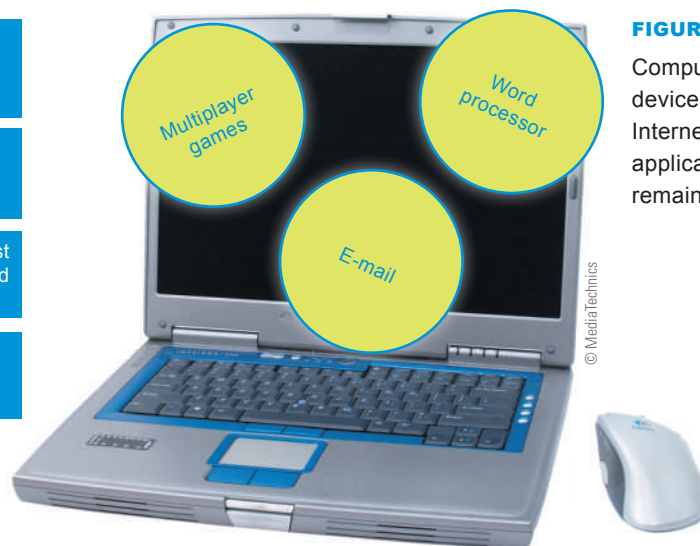
► **So what was computing like?** During the period from 1995–2010, computing was characterized by the Web, e-mail, multiplayer games, music downloads, and enormous software applications, such as Microsoft Office, Norton's Internet Security Suite, and Corel Digital Studio (Figure 1-6).

Internet connections provided access to e-mail and the Web.

Computers included multimedia equipment for music and video.

Computers stored most data locally on the hard disk or flash drives.

Application software was typically stored locally.



### TRY IT!

The Web and the Internet are not the same. Why?

- ☐ The Internet is a communications network; but the Web consists of content that is distributed by the Internet
- ☐ The Internet consists of sites like Twitter and Facebook, whereas the Web links devices like iPods and computers

**FIGURE 1-6**

Computers were the primary devices for accessing the Internet prior to 2010, but applications, media, and data remained on the local hard disk.