# CHAPTER 6 G

## Government and Politics

After completing this chapter, you will be able to:

- Realize how multimedia can be used to improve access to state and local government
- Assess how your state is using multimedia, and determine whether the way it is using multimedia is good or bad for its citizens
- Understand how the city of Atlanta used multimedia to win its bid to host the Olympic Games
- Question whether multimedia makes too much information available too quickly to the public during wartime
- Realize how politicians are using the World Wide Web for virtual campaigning
- Find out how to check up on your congressional representatives to see how well they are representing your views on important votes
- Learn how the Internet is shifting the political power base from special interests groups to the citizenry

Government officials have turned increasingly to multimedia for solutions to problems inherent in governance. Multimedia kiosks make services more widely available and enable municipalities to respond more quickly to emergencies and disasters. Videoconferencing and the Internet provide ways for politicians to reach, canvass, and broaden their constituencies. Countries that want to be competitive in the new global economy are quickening the pace of the development of their national Information Superhighways. Governments are using the Internet to find out more about what is happening around the world and to document it for the United Nations. Since human nature unfortunately dictates that peacekeeping will inevitably break down, the military uses multimedia to wage war effectively.

#### **Public Service Kiosks**

CITY-INFO kiosks have been installed throughout Vienna, Austria, to offer citizens and travelers the ability to find information on addresses, points of interest, shops, restaurants, public transportation, hours of operation, guided tours, and the cost and location of tickets, buses, museums, and events. Set up in public areas like train stations, monuments, and other frequently visited places, the kiosks were designed to be easily recognizable yet blend in with their surroundings. The kiosks are connected to a network that updates them simultaneously. In their careful analysis of user reaction to the CITY-INFO kiosks, Professors Hitz and Werthner (1993) from the University of Vienna reported these results:

It can be stated that the system is judged extremely positive (93%).... Typical users are young (43% under the age of 25), male (70%), tourists (55%) and well educated (32% high school, 34% university). They strongly recommend the usage of such a system (62% very much).... It is interesting that more than half would like to access such information via their [own] equipment and also 52% are willing to pay for such a service.

North Communications has deployed hundreds of kiosks across four continents, including municipal kiosks in the cities of Sacramento, Phoenix, New York, and Brisbane, Australia; and state government kiosks in California, Nebraska, Kansas, Hawaii, Arizona, New Mexico, and Texas. North has also set up federal government kiosks for Medicare, Social Security, veterans' benefits, and the U.S. Postal Service. As illustrated in Figure 6-1, North's product line covers motor vehicle services, employment services, public information products, legislative access, court automation, and TouchTeller financial services for banks and credit unions that want to take online banking to the streets.

For example, North developed a Quick Court kiosk for the Supreme Court of the State of Arizona. Now deployed throughout the state in court lobbies and libraries, the Quick Court kiosks provide information to litigants, produce legal documents for use in court cases, and increase public access to the courts. The kiosks use text, graphics, and an on-screen narrator to help litigants handle divorces, child support, name changes, affidavits, small claims, and landlord/tenant disputes.



Figure 6-1 Info/Media products available from North Communications. For the latest information, visit http://www.infonorth.com.



**Figure 6-2** The TouchTeller kiosk from North Communications.

North has installed dozens of kiosks across the five boroughs of New York City. One of the more frequent uses is to pay parking fines, which netted the city a significant savings in transaction fees. Oxford Bank combined North's kiosks with the NetGain secure browser to create a new concept in branch banking. Customers now can access the bank's online Web services through touchscreen "TouchTeller" kiosks. Figure 6-2 shows the TouchTeller kiosk. To learn more about touch-screen kiosk applications, follow the *Multilit* Web site link to North Communications.

The State of Oregon's Employment Division uses multimedia kiosks in shopping malls, grocery stores, libraries, and community colleges to provide up-to-the-minute information about job openings that can be accessed simply by touching the screen. When the kiosk is not in use, it attracts users by playing video scenes of Oregon accompanied by lively stereo music. Referring to the kiosks in a press conference, then governor of Oregon Barbara Roberts stated, "We are going to change state government. We must be more efficient, and we must be smarter in how we deliver our services to the people in the state."

Figures 6-3 through 6-5 show screens from the Oregon kiosk. The purple buttons are active all the time and jump straight to the submenu of the button selected. All screens and videos are also available in Spanish by touching the ESPAÑOL button. For a list of Oregon kiosk locations, follow the *Multilit* Web site link to Oregon Kiosks.



**Figure 6-3** A regional map showing Oregon Employment Division kiosk locations.

**Figure 6-4** The result of pressing one of the red dots in Figure 6-3.

**Figure 6-5** Oregon kiosk users can select the cities in which they are interested in finding jobs.

#### **Electronic Town Meetings**

CNN talk show host Larry King and CNN's *TalkBack Live* host Bobbie Battista are champions of the electronic town meeting, in which telephones are used to provide interactivity during television broadcasts. Since the number of people who can call in is limited by the length of the broadcast, interactive discussion groups on the Internet are being used to provide more people an opportunity to discuss their views. The Internet makes the meetings virtual, since they are no longer bounded by time or place. To participate, follow the *Multilit* Web site link to *TalkBack Live*.

The Internet is also becoming popular as a polling device on commercial television networks. Polls were formerly taken by asking viewers to call different phone numbers to register their response to a given question. Pollsters now advertise Internet addresses, which enable viewers to respond over the Information Superhighway. Many television shows are followed up by discussion sessions on computer networks, where the issues can be debated in more depth.

### Internet and the National Information Superhighways

Realizing how any country that does not go online will be disenfranchised and unable to compete in the global economy, governments are spending billions of dollars to hasten the construction of their national Information Superhighways. The global connection of these highways into a worldwide network is referred to as the Internet. As this book goes to press, more than 170 countries are already connected, with more than 45,000 networks online on the Internet.

Experts disagree on whether the new technology will narrow or broaden the digital divide that separates the haves from the have-nots. As Mack (1999) reports, 88% of the world's Internet users are from wealthy nations. The average worker in Bangladesh, for example, would need to save for eight years just to buy a computer. There is only one telephone for every 100 people in Cambodia. Arpanet creator Paul LeBlanc counters that developing nations can leapfrog by taking advantage of newer technologies, for example, by constructing wireless cell phone towers instead of stringing wire to provide connectivity. For more arguments on both sides of this issue, follow the *Multilit* Web Site link to the Digital Divide.

For the reasons mentioned earlier, any country that does not go online and become proficient in using the Internet will become disenfranchised and seriously impede its ability to compete in the global economy.

#### Safeguarding National Interests

When serving as president of the United States, George Bush criticized the Central Intelligence Agency (CIA) for being so slow to issue reports, the White House learned more about world developments by watching commercial TV. The government now uses multimedia computers to provide officials with live TV feeds from news channels such as CNN, which appear in windows on the screen alongside other applications.

The government is also using the Internet to solve crimes. For example, the Federal Bureau of Investigation (FBI) posted a message on the Internet's NASA Network Information Center, asking for help in solving the Unabomber case, which involved a series of bombings targeting the computer industry, universities, and the aircraft and airline industries (*Wall Street Journal* 12/31/93: 10).

#### Warfare

The Gulf War and the war in Bosnia demonstrated how effectively multimedia can wage war. Imagine yourself in control of a smart bomb. You are seated at a multimedia computer, aiming a laser that steers the bomb. In a window, you view a live video feed from a camera in the smart bomb, showing precisely where it is headed. Your multimedia computer provides such fine control that you can fly the bomb into an air duct to penetrate an otherwise highly fortified building.

Although the accuracy of aerial multimedia weaponry lessens the need for ground forces, army combat is still a reality. When casualties occur, multimedia medicine steps in. For example, consider a group of army doctors at an EVAC hospital, facing a tough decision. Shrapnel has mutilated an artery and a vein in a soldier's leg. Conventional field medicine recommends amputation. Instead, doctors photograph the wound with a Kodak digital camera that has a small computer system interface (SCSI, pronounced *skuzzy*) port for plug-and-play capability. The images and patient history are uploaded via satellite to the Walter Reed Army Medical Center in Bethesda, Maryland, where

specialists guide the field doctors through delicate reconstructive surgery that saves the leg. Detailed information on digital cameras is linked to the *Multilit* Web site.

Not all warfare uses conventional weapons. A more subtle form of information warfare is emerging. According to former CIA director John Deutch, the trend toward increased corporate reliance on telecommunications and networks is making the United States more vulnerable to information warfare tactics. "The electron, in my judgment, is the ultimate precision-guided munition. Virtually any single 'bad actor' can acquire the hardware and software needed to attack some of our critical information-based infrastructures.... We have evidence that a number of countries around the world are developing the doctrine, strategies and tools to conduct information attacks" (Wall Street Journal 6/26/96: B6). When serving as deputy U.S. attorney general, Jamie Gorelick warned that "an electronic Pearl Harbor" is a very real danger. About 250,000 intrusions into defense department computer systems are attempted each year, with about a 65% success rate (BNA Daily Report for Executives 7/17/96: A22). For more information about the use of information technologies in advanced defense applications, follow the Multilit Web site link to the Defense Advanced Research Projects Agency (DARPA) Information Technology Office, the Federal Bureau of Investigation, and the National Infrastructure Protection Agency.

#### **Olympic Bidding**

A big problem faced by the city of Atlanta at the outset of its bidding in 1988 for the 1996 Summer Olympics was lack of recognition as an international city. At that time only about 15 of the 90 voting members of the International Olympics Committee had ever been to Atlanta, which was known more for *Gone With the Wind* and similar visions of the Old South. Based on recommendations by Dr. Pat Crecine, then president of Georgia Tech, Atlanta used a multimedia campaign to promote a modern image of the city and project through realistic computer graphics what the planned stadium and other proposed facilities would be like. For example, Figure 6-6 shows the proposed Olympic dormitory complex, and Figure 6-7 shows the computer-generated "Golden



**Figure 6-6** A computer graphics rendering of the proposed Olympic dormitory.



**Figure 6-7** The computer-generated "Golden Athlete" carries the Olympic torch.

Athlete" who carries the Olympic torch into the proposed Olympic stadium. As Gamble-Risley (1992) describes the experience:

Just sit down and prepare yourself to take a magnificent journey as you rush from space toward the Earth, plunge past fluffy clouds and down over snowcapped mountains, rivers and forest until you soar over Georgia and come to the city of Atlanta. After you've flown into the city, you'll come to a futuristic-looking stadium where you'll glide down corridors into an office, and exit out a window where you'll view the future site of the Olympic village... From there, the tour is literally placed in the hands of the user who uses a trackball to take control over the adventure and can essentially go sight-seeing around the city.

After winning the bid, Atlanta's multimedia presentation evolved into a system called Atlanta Vision. Figure 6-8 shows how the system allows the observer to tour all of Georgia via a GIS (Geographical Information System) database system showcasing economic development opportunities and other highlights of the state.

Frederick Dyer and Mike Sinclair, who were codirectors of the Georgia Tech Multimedia Lab during Atlanta's quest for the Olympics, created 360-degree panoramic views by taking pictures from a helicopter with a motordrive 35mm camera. After digitizing the frames, the lab developed techniques for computer-correcting the resulting images for various distortions and then electronically composited them, resulting in images like the one shown in Figure 6-9. The multimedia presentation system continues to be enhanced and supported by the Georgia Power Company as a statewide, economic development tool for Georgia. A number of new multimedia ventures for Sports Technology, Coca Cola, dance technology groups, and others have been developed from the original technology. Today, more than a decade after its formation, the Lab is busier than ever with a wide variety of projects. Currently, key new activities include participation in the Video Development Initiative (ViDe) for the Internet2 project of the University Corporation for Advanced Internet Development (UCAID) and several distance education initiatives in Georgia.

For more information, contact codirectors Andy Quay and Ed Price at the Georgia Tech Interactive Media Technology Center. Their e-mail addresses are Andy.Quay@oip.gatech.edu and Ed.Price@oip.gatech.edu. Fred Dyer's e-mail address is fred@peachnet.edu. To learn more about how multimedia is being used to promote Olympic venues, follow the *Multilit* Web site links to various Olympic Games and Committees.



**Figure 6-8** The Atlanta Vision kiosk uses a multiscreen panoramic presentation system.



**Figure 6-9** Frederick Dyer and the 360-degree panoramic view upon which the Olympic rings float.

#### **Politics**

The Web has become a strategically important place to find out what is happening in politics and make your voice heard. If you follow the *Multilit* Web site links to VoteNet and VOTE.com, you will immediately see how the Web provides the most comprehensive vehicle for polling that the world has ever known. VOTE.com inventor Dick Morris hopes that voting on the Web will make individuals become so powerful that special interests no longer will be able to control the Congress because so many citizens will express their individual opinions.

You can find out how your congressional representatives are voting by following the *Multilit* Web site link to Thomas, where you will find the congressional record online. By following the link to C-Span, you can follow live video Web coverage of the House and Senate, browse the C-Span programming guide, and get a free membership to *C-SPAN in the Classroom.* You can also follow the *Multilit* Web site link to take a free peek into the *National Journal*'s Cloakroom, which is a members-only site that provides opportunities to make your voice heard, talk with others about issues that concern you, and reach out and communicate directly with decision makers in politics and government.

#### **Virtual Campaigning**

According to Buchanan (1994), the Internet played a significant role in Landon Curt Noll's election to the Sunnyvale (California) City Council. Noll recruited a third of his volunteer campaign organization directly from the Internet, on which voters asked why he was running for office and what he hoped to accomplish. Overall, Noll estimates he reached 50,000 voters through the Internet.

Wasserman (1999) reports that even though there are fewer campaign donations via the Internet, online contributors give more on average than offline contributors; moreover, online supporters are repeat contributors. John Aristotle Phillips, cofounder of Aristotle, a leading provider of campaign management software, predicts that by 2004, 80% of the money raised from individuals for political candidates will come from Internet sources. For the complete story, follow the *Multilit* Web site link to Finding Money on the Web.

The Internet has become so important to public officials getting elected that almost every political candidate has a Web site. To find out where the political candidate Web sites are, follow the *Multilit* Web site link to Yahoo's index of political candidate Web sites.

### **FinanceNet**

FinanceNet is an independent public Internet network that was established by then Vice President Al Gore's National Performance Review in Washington, D.C. Operated by the National Science Foundation, FinanceNet is the information clearinghouse of the Joint Financial Management Improvement Program. FinanceNet reaches across geopolitical boundaries to link financial management staff worldwide to catalyze continuous improvements in employee productivity and taxpayer resources. To access it, follow the *Multilit* Web site link to FinanceNet.

#### **Small-Business Assistance**

The U.S. Business Advisor offers small businesses online access to guides and government forms needed to comply with regulations or apply for government-backed loans or other federal assistance. The goal is to provide small businesses with one-stop access to federal agencies that regulate and assist business (*Wall Street Journal 2*/14/96: B2). The U.S. Small Business Administration (SBA) offers a full range of services including information about start-up capital, how to secure financing, developing a business plan, attending SBA Training and Conferences, using the online Small Business Classroom, and conducting business online. To visit the U.S. Business Advisor and SBA Web sites, follow the *Multilit* Web site links.

#### **Patent Searches**

The U.S. government has a Web site where you can do patent searches online. Follow the *Multilit* Web site link to the U.S. Patent Office, then select Search U.S. Patent Bibliographic Data. This service is maintained by the Center for Networked Information Discovery and Retrieval (CNIDR), in cooperation with the U.S. Patent and Trademark Office (USPTO).

#### **Internal Revenue Service**

The Internal Revenue Service (IRS) has a Web site where you can find out about the tax code, download tax forms, and file your income tax return over the Internet. Follow the *Multilit* Web site link to visit the IRS online.

#### exercises

- How is multimedia used by your state government? Do multimedia kiosks, for example, help tourists find their way around your largest cities? Is there an employment kiosk to help the unemployed find jobs? Is multimedia used to make disaster relief available to those who need it? Does your state use multimedia to deliver driver's license tests?
- 2. Think of three more ways multimedia could be used to improve government services to your community. Describe how you would want them implemented.
- **3.** The city of Atlanta used multimedia to help win its bid to host the Olympic Games. How could your local government use multimedia to promote your cities and strengthen their economy?
- 4. President George Bush used to complain that he learned more from watching CNN on TV than he did from the CIA. So could terrorists. To what extent should news coverage of nationally sensitive information and events be curtailed? For example, during their amphibious landing on the beach in Somalia, soldiers complained that television lights betrayed their positions. Should wars be televised?
- 5. Browse to http://thomas.loc.gov and check the record to find out whether your congressional representatives are voting the way you want them to. Use the House and Senate directory to find out their e-mail addresses, and send them e-mail to express your views. What are the names and e-mail addresses of your state's U.S. senators? What is the name and e-mail address of your voting district's U.S. representative?