KEY TERMS

behavior controls (p. 84)
mobile workers (p. 86)
offshoring (p. 90)

outcome controls (p. 84)
personnel controls (p. 84)
remote workers (p. 86)

telecommuting (p. 86)
virtual teams (p. 87)

DISCUSSION QUESTIONS

1. Why might an employee resist the implementation of a new technology? What are some of the possible consequences of asking an employee to use a computer or similar device in his or her job?

2. How can IT alter an individual's work? How can a manager ensure that the impact is positive rather than negative?

3. What current technologies do you predict will show the most impact on the way work is done? Why?

4. Given the growth in telecommuting and other mobile work arrangements, how might offices physically change in the coming years? Will offices as we think of them today exist by 2030? Why or why not?

5. How is working at an online retailer different from working at a brick-and-mortar retailer? What types of jobs are necessary at each? What skills are important?

6. Paul Saffo, former director of the Institute for the Future, noted, "Telecommuting is a reality for many today, and will continue to be more so in the future. But beware, this doesn't mean we will travel less. In fact, the more one uses electronics, the more they are likely to travel."[39] Do you agree with this statement? Why or why not?

7. The explosion of information-driven self-serve options in the consumer world is evident at the gas station where customers pay, pump gas, and purchase a car wash without ever seeing an employee; in the retail store such as Walmart, Home Depot, and the local grocery where self-service checkout stands mean that customers can purchase a basket of items without ever speaking to a sales agent; at the airport where customers make reservations and pay for and print tickets without the help of an agent; and at the bank, where ATMs have long replaced tellers for most transactions. But a backlash is coming, experts predict. Some say that people are more isolated than they used to be in the days of face-to-face service, and they question how much time people are really saving if they have to continually learn new processes, operate new machines, and overcome new glitches. Labor-saving technologies were supposed to liberate people from mundane tasks, but it appears that these technologies are actually shifting some tasks to the customer. On the other hand, many people like the convenience of using these self-service systems, especially because it means customers can visit a bank for cash or order books or gifts from an online retailer 24 hours a day. Does this mean the end of "doing business the old-fashioned way"? Will this put a burden on the elderly or the poor when corporations begin charging for face-to-face services?[40]

■ CASE STUDY 4-1 Trash and Waste Pickup Services, Inc.

Martin Andersen is responsible for 143 of Trash and Waste Pickup Services, Inc.'s (TWPS's) garbage trucks. TWPS is a commercial and household trash hauler. When a caller recently complained to Andersen that a brown and green Trash and Waste Pickup Services truck was speeding down Farm Route 2244, Andersen turned to the company's information system. He learned that the driver of a company front-loader had been on that very road at 7:22 A.M., doing 51 miles per hour (mph) in a 35 mph zone. The driver of that truck was in trouble!

The TWPS information system uses a global positioning system (GPS) not only to smooth its operations but also to keep closer track of its employees, who may not always be doing what they are supposed to be doing during work hours. Andersen pointed out, "If you're not out there babysitting them, you don't know how long it takes to do the route. The guy could be driving around the world, he could be at his girlfriend's house."

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[39] "Online Forum: Companies of the Future," http://www.msnbc.com/news/738363.asp (accessed June 11, 2002).

[40] Stevenson Swanson, "Are Self-Serve Options a Disservice?" *Chicago Tribune* (May 8, 2005), Section H, 1d.

Before TWPS installed the GPS system, the drivers of his 37 front-loaders clocked in approximately 250 hours a week of overtime at one and a half times pay. Once TWPS started monitoring the time they spent in the yard before and after completing their routes and the time and location of stops that they made, the number of overtime hours plummeted to 70 per week. This translated to substantial savings for a company whose drivers earn about $20 an hour.

TWPS also installed GPS receivers in salesmen's cars. Andersen was not surprised to learn that some of the company's salespeople frequented The Zone, a local bar, around 4 P.M. when they were supposed to be calling on customers. Andersen decided to set digital boundaries around the bar.

Understandably, the drivers and salespeople aren't entirely happy with the new GPS-based system. Ron Simon, a TWPS driver, admits: "It's kind of like Big Brother is watching a little bit. But it's where we're heading in this society. . . . I get testy in the deli when I'm waiting in line for coffee, because it's like, hey, they're (managers) watching. I've got to go."

Andersen counters that employers have a right to know what their employees are up to: "If you come to work here, and I pay you and you're driving one of my vehicles, I should have the right to know what you're doing."

Discussion Questions

1. What are the positive and negative aspects of Andersen's use of the GPS-based system to monitor his drivers and salespeople?

2. What advice do you have for Andersen about the use of the system for supervising, evaluating, and compensating his drivers and salespeople?

3. As more and more companies turn to IS to help them monitor their employees, what do you anticipate the impact will be on employee privacy? Can anything be done to ensure employee privacy?

Source: This is a fictitious case. Any resemblance to an actual company is purely coincidental.

■ CASE STUDY 4-2   Social Networking: How Does IBM Do It?

IBM's award-winning developerWorks site was established in 2000 as a technical resource repository for the company's global development community. Designed to share knowledge and skills related to IBM products and other key technologies, it has been a solid success. The site attracts about 4 million unique visitors a month—including students, professionals, and developers from almost all the world's countries—who search its library of 30,000 articles, demos, podcasts, and tutorials. developerWorks is available in eight languages, including Russian, Chinese, and Spanish, and about 70% of its visitors come from outside IBM.

My developerWorks, a social networking function, was added to the repository platform in 2009 to allow developers to connect, communicate, and collaborate on projects. Soon the network had added more than 600,000 user profiles as well as numerous blogs and forums. In addition to allowing established business, start-ups, and partners to collaborate, it has also helped users find answers to support questions that would otherwise go to IBM's call centers and help desks, thus saving the company an estimated $100 million.

Alice Chou, Director of IBM developerWorks, carefully monitored the number of My developerWorks profiles and the volume of traffic to the site. She looked at unique visitors, developer demographics, time spent on the site, and patterns of page views. She created a reward and recognition framework so that when users contributed a highly regarded article or blogpost to the site, "they got the kudos they deserve."

Discussion Questions

1. How might My developerWorks leverage changes in the way people work?

2. Why do you think Alice Chou carefully monitors the My developerWorks site? What would be an example of an insight she would gain from the data she's collecting?

3. Why do you think Alice Chou thinks a rewards program is necessary for My developerWorks because so many profiles have already been developed. Do you agree that a reward would be necessary?

Sources: IBM, www.ibm.com/developerworks (accessed April 17, 2012); Ellen Traudt and Richard Vancil, "Becoming a Social Business: The IBM Story," IDC White Paper #226706 (January 2011), 1–14 (quote on p. 6, developerWorks at http://www.ibm.com/developerworks/).