WHAT WORK WILL NEED DOING?

We can predict the types of jobs Americans will perform in the next century based on longterm trends. At the time of the Revolutionary War, the U.S. economy was largely agricultural. Nonagricultural employment, however, grew steadily in importance as manufacturing developed and finally overtook agricultural employment shortly after the Civil War.

This shift from agriculture to manufacturing was followed by a second major shift from manufacturing to services. By the early twentieth century, the number of workers in the service-producing sector was reaching parity with that in the manufacturing sector. These trends have continued through the century, causing some analysts to label the American economy “postindustrial.” The Department of Labor’s Bureau of Labor Statistics (BLS) projects similar employment trends in the future.

Employment shifts from manufacturing to services

The number of jobs in the goods-producing sector of the economy has been fairly stable since 1970 and is projected to remain so over the 1996-2006 period, with a projected increase of only 20,000 jobs. Construction is the only major goods-producing industry where employment is projected to increase, due to a strong demand for housing.

Though still the largest employer among goods-producing industries, manufacturing now accounts for only half the share of total nonfarm employment it did in 1970. Between 1996 and 2006, manufacturing is projected to decline by 350,000 jobs to 18.1 million. The decline in manufacturing jobs has been characterized as the deindustrialization of America.

The workforce becomes increasingly urban

Continuing a long trend, agriculture, which has under 4 million jobs or less than 3 percent of all employment, is projected to decline by 24,000 more jobs over the period 1996 to 2006. As agriculture has declined as a source of employment, the American workforce has become increasingly urban and suburban. The decline in the family farm has caused many Americans to exchange their rural lifestyle for an urban one. Over the last 30 years, the percentage of the population living in urban areas has increased by more than 30 percent to the point that 4 out of 5 people live in urban areas.

Cost reduction has driven part of the recent loss of U.S. manufacturing jobs. Many U.S.-based multinational corporations have relocated much of their low-skilled production to foreign countries where wages for unskilled workers are relatively low—Mexico as well as Asian countries such as China, Malaysia, and Thailand. Large numbers of U.S. jobs have been lost in the textile and apparel industries. In response to imports growth, some textile firms have invested heavily in labor-saving capital equipment, further reducing employment.

Growth in service jobs

Since 1970, most job growth has been in the service producing sector, a trend expected to continue as non-household service producing jobs are projected to increase by 17.6 million between 1996 and 2006.

The combination of political freedom and political stability have created a climate in which new ideas can flourish to yield economic progress. This chapter examines two principal characteristics of workplaces that may affect their future—the industry of the employer and whether the workplace is unionized.

BOX 4.1

American small businesses

New business formation reached a record level in 1998 with an estimated 998,000 new firms.

While it seems that “high tech” ventures are all the rage, high-tech firms may actually account for only two percent of all small business start-ups. Small businesses come in all shapes and sizes, but many still begin as a one-person shop in the garage. In many cases, Americans are turning their hobbies into lucrative new businesses. Roughly 60 percent of all new small businesses are started in the home with existing technology and capital, which may mean the kids’ computer and the parents’ credit card. People with disabilities are taking advantage of benefits afforded by entrepreneurship—they have more small business experience and higher rates of self-employment than people without disabilities.

Small businesses currently employ about half of the private sector workforce.

*While it varies with the industry, the Small Business Administration definition of small business includes companies with as many as 500 employees.

source: Small Business Administration, Office of Advocacy

American workplaces have long been an arena for change. The combination of political freedom and political stability have created a climate in which new ideas can flourish to yield economic progress. This chapter examines two principal characteristics of workplaces that may affect their future—the industry of the employer and whether the workplace is unionized.

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Just as the early twentieth century shift toward more efficient assembly-line techniques cost manufacturing jobs, so too have computer-technology-based productivity increases made it possible in the last decades of the century to produce more goods with fewer employees. Though manufacturing’s share of total employment has declined, it still accounts for about 30 percent of total gross domestic product today, as it has for the last three decades.

Widespread use of just-in-time production is another reason for manufacturing’s reduced employment. With just-in-time production, firms carefully time their production schedules to the needs of their retail outlets or end users, avoiding costly inventory holding and increasing efficiency.

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(Outsourcing of production to other countries is discussed further in chapter 6, Technology and globalization.)

Growth in service jobs
Since 1970, most job growth has been in the service-producing sector, a trend expected to continue as non-household service-producing jobs are projected to increase by 17.6 million between 1996 and 2006.
One force driving the growth in service jobs has been a shift from work done in the home by family members to work done in the market. (See box 4.2.)

Families are "contracting out" work they used to do themselves. The way Americans prepare meals provides a dramatic example. Meals eaten at home rely increasingly on the purchase of prepared or partially prepared foods. Food stores have hired more staff to respond to the need for convenience with features such as delis and salad bars. Fast-food and carryout restaurants, as well as restaurants delivering food to the home, have both diversified and multiplied. The growth in meals eaten outside of the home, the result of both a long-term trend and the recent economic boom, has also led to a sharp increase in employment at eating and drinking establishments. This trend can be expected to continue as children brought up in homes where little cooking is done grow up lacking traditional cooking skills.

Increases in the percentage of women who work outside the home have contributed to the growth in retail services as well as retail products. Greater spending power and limited free time have increased the growth of stores that provide convenience—from catalog shopping to greater emphasis on customer service to personal shopper services. Child care, too, is being "contracted out"—to daycare centers and nannies. The childcare industry is projected to add 164,000 jobs between 1996 and 2006. Similar changes are occurring in the care of the increasing population of elderly persons. Residential care institutions—which provide 24-hour, year-round personal care and only incidental health care—have multiplied, along with nursing homes and home healthcare services.
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Healthcare jobs have increased since the 1950s—more than in any other comparable industry group—due to population aging, new technologies, and greater administrative requirements. Jobs in medical offices, clinics, and health maintenance organizations have grown rapidly as the healthcare industry tries to provide more services in less expensive ways. Nurse practitioners (who typically have a master’s degree and more training than registered nurses) have increased in number as the healthcare industry encourages their use for functions formerly performed by doctors. In recent years, states have increased nurse

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**BOX 4.2 Buying time**

American workers are increasingly buying time-saving products (dinner from the local deli comes complete with vegetables and disposable utensils) and hiring others to perform household services such as gardening, live-in child care, and housekeeping. Among recent clients at Maria America, a Southern California agency that places housekeepers, nannies, and other domestic help—a plumber, a fast food manager, and a supermarket cashier.

Across income levels and occupations, workers' reasons for hiring help are the same: they are buying time. Ken Dees, who is a software engineer, and his wife Diane, a hospital executive, employ a nanny and a part-time gardener. Says Mr. Dees, "My grandfather must be turning in his grave that there are people mowing our lawn. We never had help when we were growing up. Up until a few years ago, I moved my own lawn... But I dreaded racing home from work, scrambling to make dinner for the kids. Our careers have accelerated and this makes life so much easier."

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**BOX 4.3 Women in business**

The state of women-owned businesses today is impressive:
- From 1987 to 1999, the number of women-owned firms in the United States more than doubled.
- About 40 percent of all businesses in America today are owned by women.
- Women-owned businesses employ 27.5 million workers and generate annual sales and receipts of $3.6 trillion.
- Women start businesses at twice the rate of all business start-ups.
- The greatest growth in women-owned businesses between 1992 and 1999 occurred in the construction, wholesale trade, transportation, communication, agriculture, and manufacturing industries.
- Hispanic women are the fastest growing segment of the small business community—they are three times as likely to start their own business as other business owners.
- More than 60 percent of women-owned small business start-ups are based at home.

Despite progress, women business owners still face obstacles. Securing sufficient financing to take a business to the "next step" remains one of the largest inhibitors. Women's access to capital—both debt and equity financing—has been limited because many of their businesses are simply too small to meet the criteria of most venture capital funds. Groups such as the founders of the Women's Growth Capital Fund hope to reduce such financial impediments through a venture capital fund designed to finance women-owned businesses into the twenty-first century.

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**SOURCE:** Adapted from The Wall Street Journal, June 23, 1999

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practitioners’ authority, often allowing them to prescribe drugs and admit patients. Health-services employment is projected to increase by 3.2 million jobs between 1996 and 2006. Contracted-out business activities have accounted in part for the decline in the manufacturing sector, while making business services the most rapidly growing industry in percentage terms. Activities once done within manufacturing firms are now accomplished externally, causing rapidly expanding employment in such businesses as computer services, data processing, advertising, and mailing and reproduction.

Employment in government has been decreasing at the federal level and increasing at the state level. During the Clinton–Gore administration, federal government employment had decreased at the federal level and increasing at the state level. During the Clinton–Gore administration, federal government employment has declined to its lowest level in 30 years, while state and local government employment, particularly in education, has increased and is projected to continue to grow through 2006.

The virtual marketplace will have major influence
Electronic commerce, or e-commerce—buying, selling, or conducting other transactions via the Internet—has important implications for the workplace. Retail sales over the Internet avoid direct public contact and direct exchange of cash, potentially reducing customer discrimination or workplace violence. People with disabilities can increase their access to jobs and marketplace goods and services through computer technologies. The popularity of such firms as bookseller Amazon.com and on-line discount brokerage Charles Schwab has prompted a host of other companies to rush to do business on the Web. In one year (1996 to 1997) sales through e-commerce more than doubled, from $15.5 to $38.8 billion, and in 1998, sales are estimated to have exceeded $300 billion. New estimates are for total e-commerce to reach $1 trillion a year by 2005. E-commerce reduces use of conventional stores, increases mail delivery services, and reduces inventory. Conventional stores may have to change to compete, providing more customer service or more ambience, or inventing new amenities.

WHO WILL BELONG TO UNIONS?
In 1998, 16 million workers were union members—16 percent of employed men and 12 percent of employed women. Blacks had higher membership rates than whites and Hispanics—18 percent, 14 percent, and 12 percent, respectively. Over the twentieth century, union membership has followed the rise and fall of American industries. As the share of manufacturing jobs declined, so did the percentage of workers who belonged to unions. International competition for low-cost labor and employer opposition to organizing may have contributed to the decline. But the 1990s have seen an increase in union organizing drives, especially in industries such as health care and state and local government, where future growth is expected.

Crossing trend lines . . . and their causes
In the second half of the twentieth century, following the issuance of executive orders by Presidents Kennedy and Nixon and the passage of the Civil Service Reform Act of 1978, union membership increased sharply among government workers but dropped in the private sector. From 1950 to 1998, union membership more than tripled in the public sector—from 10 percent to over 37 percent of that workforce. During the same period, private-sector unionization declined from 35 percent to 10 percent. Union membership showed signs of increase in the late 1990s. While international competition, particularly in certain manufacturing industries like apparel and footwear, played a role in declining private-sector unionization during the last half of the century, renewed employer hostility to organizing has also contributed to the decline in union membership rates. In the early 1950s, employers unlawfully discharged union supporters in just one of twenty organizing campaigns. By the 1990s, such unlawful terminations took place in a minimum of one in four union organizing campaigns, according to the 1994 report of the Commission on the Future of Worker–Management Relations. Unions’ success rate in organizing drives dropped from 75 percent to 38 percent over the period. The use of labor relations consultants by employers may also be affecting union membership. By the late 1990s, as many as 70 percent of employers facing union organizing drives had used labor relations consultants. Since the 1960s, the labor relations consulting industry has grown dra...
Box 4.4  The office of the future

A group of more than 100 electrical, chemical, mechanical, civil, and heating, ventilation, and air conditioning engineers was recently surveyed to describe how—using currently available technology—the workplace of the future will be more environmentally friendly. Overwhelmingly, engineers cited computer technology as the dominant influence on almost every aspect of the future workplace. Some of the other predictions included:

- Ergonomic keyboards and voice-activated data input and retrieval, reducing carpal tunnel syndrome and other repetitive-motion and stress-related injuries.
- A vast increase in work from home, using teleconferencing, e-mail, and other digital communications.
- More flexible control and less brute force.
- Healthier workplaces that are friendly to the environment. New office buildings will be more energy efficient, designed to use natural light and advanced, efficient lighting technologies. More people working at home means less commuting—4,000 miles less a year for the commuter with a 40-mile roundtrip to work who works at home two days a week—reducing fossil fuel consumption, emissions, and commuting stress.

Box 4.5  Evolution of retail

In times past, people poked over the Sears catalogue and purchased goods that came to them across the reaches of rural America. With urban development came large downtown department stores for the same shopping. Then came suburban living and the invention of the shopping center. Now technology has once again released our shopping from geographic connections: one can purchase almost anything imaginable, from almost anywhere in the world, over the Internet.

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Unions reverse earlier decline
Recent organizing efforts successfully targeted low-wage workers and others with historically low levels of unionization. In 1998, 4,500 workers at a large Las Vegas hotel persuaded their employer to voluntarily recognize their choice of the Hotel Employees and Restaurant Employees Union. In 1999, 75,000 home care workers in southern California voted for representation by the Service Employees International Union. Other unions used new, coordinated methods of organizing to extend representation to diverse crafts workers in a single industry and region: the building and construction trades unions in Las Vegas registered 7,000 new members between 1997 and 1998. Five unions concentrated their efforts on 175,000 public employees in Puerto Rico in 1999, with positive results. Still other unions focused on the service sector: the International Association of Machinists was chosen by 19,000 passenger-service workers at United Airlines in 1998.

At the same time, a small but growing number of employers were calling for a truce with organized labor by agreeing to forego protracted and often bitter campaigns that precede a union election. Several major communication companies, for example, reached agreements with the Communications Workers of America (CWA) to recognize the union without an election where a majority of employees showed their support for CWA representation by signing recognition cards. Card-check recognition, as it is called, resulted in union representation without a contested election for thousands of workers at employers such as SBC Communications, Ameritech, and Pacific Bell Wireless. And at Lucent and AT&T, labor and management agreed to an expedited election process after a majority of workers indicated their support for union representation. Similarly, USX and Bethlehem Steel agreed with the United Steelworkers of America to remain neutral during organizing drives at their nonunion facilities and at newly acquired ventures.

While some organizing campaigns met with less success, the labor movement’s use of new approaches and emphasis on new industries may yield additional gains in union membership in twenty-first century workplaces.

Unions benefit workers—and employers
Unions have continued to generate higher worker pay and benefits. Union members overall earned nearly one-third more than nonunion workers. Black and Hispanic workers fared even better: black workers in unions earned 45 percent more than nonunion black workers, while unionized Hispanics made more than half again as much—54 percent—as their nonunion counterparts. Higher benefits, lower workplace inequality, lower workforce instability, and greater job security provide additional gains for workers—the incentives for workers to join unions remain strong.

And there is evidence that unionization helps employers as well. A 1997 study found that productivity in unionized firms with high performance workplaces was about 10 percent higher than in comparable nonunion firms. Most of the union shops had adopted programs in which up to half the workers met regularly to discuss workplace issues. When unionized firms allowed production workers to share in the firm’s profits, productivity reached rates 20 percent higher than in nonunion firms.

THE FUTURE
Future workplaces will reflect decades-long trends, such as the continued rise of employment in the service sector. Other trends appear to be reversing course. Vigorous efforts by unions to organize industries that have traditionally not been organized, as well as new approaches to organizing in other industries, may lead to increases in the unionization rate despite the continued decline in the relative share of employment in the manufacturing sector, where unionization has traditionally been high. Future workplaces will also reflect changes that cannot be predicted confidently—such as those brought about by e-commerce and the Internet—since their effects are so recent.
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Unions raise pay. Unions increase benefits. Unions keep workers safe. Unions help make sure more workers can share in our nation’s prosperity. Unions improve the lives, not just of organized labor, but for all who labor. The labor movement has always been about keeping the foundation of American values strong as we build America’s future.

Secretary Alexis M. Herman
July 30, 1998