Chapter One

Introduction to Employee Training and Development

Objectives

After reading this chapter, you should be able to

- Discuss the forces influencing the workplace and learning, and explain how training can help companies deal with these forces.
- Draw a figure or diagram and explain how training, development, informal learning, and knowledge management contribute to business success.
- 3. Discuss various aspects of the training design process.
- 4. Describe the amount and types of training occurring in U.S. companies.
- 5. Discuss the key roles for training professionals.
- Identify appropriate resources
 (e.g., journals, websites) for learning about training research and practice.

Forces Affecting the Workplace Make Training a Key Ingredient of Company Success

Customer service, productivity, safety, employee retention and growth, uncertainty in the economy, extending learning beyond the classroom, the use of new technology—these are just some of the issues affecting companies in all industries and sizes and influencing training practices.

The examples presented below show how these concerns have affected companies in several different business sectors and how training has helped them succeed.

Many companies, recognizing that learning goes beyond typical face-to-face classes, are using technology to make it easier for employees in different locations to learn and share knowledge through formal courses, as well as through collaboration. For example, GameStop, the retailer of new and used video games, hardware, entertainment software, and accessories, has 18,000 employees in more than 6,600 locations in the United States, Australia, Canada, New Zealand, and Europe. Who doesn't like to play video games like Super Mario, Borderlands, or DragonBall XenoVerse! Its customers can get games from GameStop that they can't get anywhere

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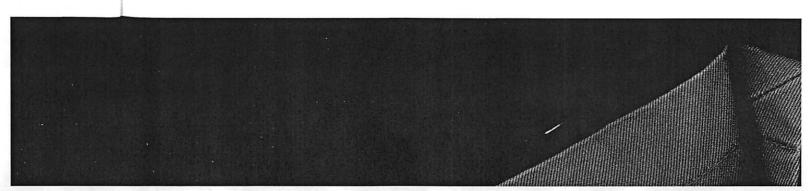
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else, and it allows customers to buy, sell, or trade games unlike many of its competitors. GameStop serves a variety of customers, including five-year-olds and their parents who are looking for Nintendo games to adult gamers who want to buy the latest gaming equipment. Most GameStop employees (called game-associates) hold part-time, entry-level jobs, requiring working several shifts during the week. They often leave for other jobs or opportunities such as going back to school. Training helps GameStop successfully deal with turnover by ensuring new employees provide consistent customer service that translates into satisfied customers and return business. Most new employees who join GameStop are expert gamers, have expertise about the technology and trends influencing the gaming market, and were loyal customers. As a result, GameStop's training doesn't focus on teaching employees about video games but instead emphasizes how to interact with customers and understand their gaming needs. Also, the training helps employees become ambassadors for the company by sharing their knowledge and passion for gaming with customers. The LevelUp program is an online program that enables employees to complete training on their own time and at their own pace, scoring points based on achieving different skills and advancing to the next level. Training content varies based on the employees' needs; it allows them to log in and out of training at any time and skip sections they already know. The LevelUp program helps prepare new game-associates as well as provide training for more experienced game-associates who may be more interested in a retail career and want to gain the knowledge and skills necessary to become assistant managers and store managers.

McAfee, part of Intel Security, is the world's largest dedicated security technology company. McAfee protects consumers and businesses from the malware and emerging online threats. Sixty percent of employees use social networking tools that support learning and 50 percent of training content is delivered using self-paced online instruction. McAfee also encourages knowledge sharing. Employees can connect online with potential mentors and mentees based on the personal profiles they create. A career development group helps employees collaborate and share ideas about their personal development. A language learning community is available for employees around the world to talk to each other to improve their language skills.

Blue Cross and Blue Shield of Michigan uses Knowlt and MISource to reach employees at forty different locations. Knowlt includes wikis, web courses, podcasts, discussion boards, and e-learning to provide information on more than eighty business topics. MISource gives claims and customer service employees access to information they need to better serve customers. Scotiabank Group, with operations in more than fifty companies, developed an internal social networking application, FaceForward, which includes user profiles, blogs, wikis, and social bookmarks.

US Airways provides extensive training for flight attendants and pilots. Newly hired flight attendants receive five weeks of training, including an introduction to the aviation industry, and Airbus cabin simulators include "door trainers" to practice opening emergency exits under difficult evacuation conditions, such as total darkness and billowing smoke. Training also includes jumping into a pool and inflating a life raft and helping passengers into and out of a raft. Federal law requires annual classroom safety training for flight attendants, and performance drills every two years. Pilot training includes practicing skills in a simulator that presents many



different scenarios, such as both engines failing, and re-creates the feelings and sounds experienced in flight, including turbulence. Forced landings and water ditchings are taught in the classroom. The payoff for this type of extensive training was most evident in the spectacularly safe landing of US Airways Flight 1549 and its 155 passengers and flight crew in the Hudson River in 2009. Based on their almost automatic responses developed through years of training, flight attendants were able to calm passengers, prepare them for a crash landing, and open doors and inflate life rafts to assist in the orderly but quick exit of the slowly sinking airplane. The cockpit crew followed the training they received in how to cope with engine failure and successfully conducted a water landing.

Sources: Based on M. McGraw, "Staying Power," Human Resource Executive (January/February 2015): 39-41; "McAffee. Part of Intel Security," TD (October 2014): 98. Training Top 125, training (January/ February 2011): 54-93. 36; S. McCartney, "Crash Courses for the Crew," The Wall Street Journal (January 27, 2009): D1, D8.

INTRODUCTION

The examples discussed in the chapter opener illustrate how training can contribute to companies' competitiveness. Competitiveness refers to a company's ability to maintain and gain market share in an industry. Although they are different types of businesses, these four companies have training practices that have helped them gain a competitive advantage in their markets. That is, the training practices have helped them grow the business and improve customer service by providing employees with the knowledge and skills they need to be successful.

Companies are experiencing great change due to new technologies, rapid development of knowledge, globalization of business, and development of e-commerce. Also, companies have to take steps to attract, retain, and motivate their workforces. Training is not a luxury; it is a necessity if companies are to participate in the global and electronic marketplaces by offering high-quality products and services. Training prepares employees to use new technologies, function in new work systems such as virtual teams, and communicate and cooperate with peers or customers who may be from different cultural backgrounds.

Human resource management refers to the policies, practices, and systems that influence employees' behavior, attitudes, and performance. Human resource practices play a key role in attracting, motivating, rewarding, and retaining employees. Other human resource management practices include recruiting employees, selecting employees, designing work, compensating employees, and developing good labor and employee relations. Chapter Two, "Strategic Training," details the importance placed on training in comparison to other human resource management practices. To be effective, training must play a strategic role in supporting the business.

Human resource management is one of several important functions in most companies. Other functions include accounting and finance, production and operations, research and development, and marketing. Keep in mind that although human resource management practices (such as training) can help companies gain a competitive advantage, the company needs to produce a product or provide a service that customers value. Without the

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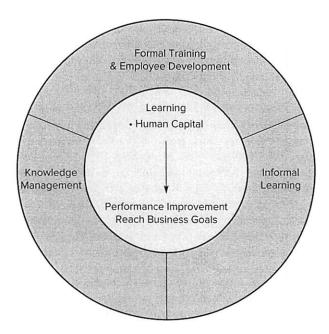
This chapter begins by defining training and development and discussing how the training function has evolved. Next, the forces that are shaping the workplace and learning are addressed. These forces influence the company's ability to successfully meet stakeholders' needs. The term stakeholders refers to shareholders, the community, customers, employees, and all the other parties that have an interest in seeing that the company succeeds. The discussion of the forces shaping the workplace (including technology, globalization, and attracting and winning talent) highlights the role of training in helping companies gain a competitive advantage.

The second part of the chapter focuses on current trends in the training area. This section also introduces you to the trainer's role in a business and how the training function is organized. This section should help you understand current training practices, the types of jobs that trainers may perform, and the competencies needed to be a successful trainer (or, if you are a manager, to identify a successful trainer). The chapter concludes with an overview of the topics covered in the book.

TRAINING AND DEVELOPMENT: KEY COMPONENTS OF LEARNING

Our focus in this book is to help you understand the role of training and development in today's organizations. To do this, it is important for you to understand what training and development means in the broader business context. Figure 1.1 shows the role of training and development for the business. The overall goal of training and development is learning. Learning refers to employees acquiring knowledge, skills, competencies,

FIGURE 1.1 The Business Role of Training and Development



attitudes, or behaviors. But the focus of training and development is not just on employees learning for its own sake. Today, merely offering training programs is not enough to get support and funding from executives and to establish the credibility of the training and development function to managers and employees. Learning needs to demonstrate how it contributes to the company's competitive advantage through improving employee performance, supporting the business strategy (such as growing the business), and contributing positively to business outcomes such as quality, productivity, development of new products, and retaining key employees. From a company's perspective, what employees learn contributes to the development of intangible assets such as human capital. **Human capital** refers to knowledge (know what), advanced skills (know how), system understanding and creativity (know why), and motivation to deliver high-quality products and services (care why). Human capital may be more valuable than physical capital (equipment or technology) or financial capital (monetary assets, cash) for providing a company with an advantage over its competitors, because it is difficult to imitate or purchase and it is unique to the company.

There are a number of different ways that learning occurs in a company. They are represented on the outside of the circle in Figure 1.1. Training refers to a planned effort by a company to facilitate learning of job-related competencies, knowledge, skills, and behaviors by employees. The goal of training is for employees to master the knowledge, skills, and behaviors emphasized in training and apply them to their day-to-day activities. Traditionally, companies have relied on formal training through a course, program, or "event" to teach employees the knowledge, skills, and behaviors they need to successfully perform their job. Development is similar to training, except that it tends to be more future-focused. Development refers to training as well as formal education, job experiences, relationship, and assessments of personality, skills, and abilities that help employees prepare for future jobs or positions. We will discuss development in more detail in Chapter Nine, "Employee Development and Careers." Formal training and development refers to training and development programs, courses, and events that are developed and organized by the company. Typically, employees are required to attend or complete these programs, which can include face-to-face training programs (such as instructor-led courses) as well as online programs. As you will see later in the chapter, U.S. companies invest billions of dollars in formal training.

Informal learning is also important for facilitating the development of human capital.² Informal learning refers to learning that is learner initiated, involves action and doing, is motivated by an intent to develop, and does not occur in a formal learning setting.³ Informal learning occurs without a trainer or instructor, and its breadth, depth, and timing is controlled by the employee. It occurs on an as-needed basis and may involve an employee learning either alone or through face-to-face or technology-aided social interactions. Informal learning can occur through many different ways, including casual unplanned interactions with peers, e-mail, informal mentoring, or company-developed or publically available social networking websites such as Twitter or Facebook. The application of social media from a marketing strategy to a learning strategy and the availability of Web 2.0 technologies such as social networks, microblogs, and wikis allow employees easy access to social learning or learning through collaboration and sharing with one or two or more people.⁴ One estimate is that informal learning may account for up to 75 percent of learning within organizations.

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One reason why informal learning may be especially important is that it may lead to the effective development of tacit knowledge, which can be contrasted with explicit knowledge. Explicit knowledge refers to knowledge that is well documented, easily articulated, and easily transferred from person to person. Examples of explicit knowledge include processes, checklists, flowcharts, formulas, and definitions. Explicit knowledge tends to be the primary focus of formal training and employee development. Tacit knowledge refers to personal knowledge based on individual experiences that is difficult to codify. The characteristics of formal training and development programs, such as the relatively short duration of classroom or online training and limited opportunities for practice, may limit the extent to which tacit knowledge can be acquired. Thus, informal learning is central to the development of tacit knowledge because it involves employee interactions in personal relationships with peers, colleagues, and experts through which tacit knowledge is shared. It is important to recognize, however, that informal learning cannot replace formal training and employee development. Formal training and development are still needed to prepare employees for their jobs and to help them advance to future positions. Informal learning complements training by helping employees gain tacit knowledge that formal training cannot provide.

Knowledge management refers to the process of enhancing company performance by designing and implementing tools, processes, systems, structures, and cultures to improve the creation, sharing, and use of knowledge.⁶ Knowledge management contributes to informal learning. G4S Secure Solutions provides security solutions around the world.⁷ Its employees are spread across field offices and client locations. Most G4S security officers don't have computer access or are restricted by client firewalls. But security officers need timely information in order to protect clients and property. Seeking and sharing knowledge can help save lives. As a result, the company developed an Internet and social networking solution. It provides access to company materials, announcements, policies and procedures, training manuals, operational and support tools, and best practice forums. It can be accessed from anywhere, giving employees the ability to ask questions across the company as well as within their office, location, or work team. The solution includes social networking features similar to Facebook. Employee can create profiles that have their skills, interests, achievements, projects, and contact information. They can participate in threaded discussions. Tags can be used to identify similar documents or discussions on the same topic. Caterpillar Inc. moved toward becoming a continuous learning organization with the help of knowledge management.8 Thirty years ago, Caterpillar Inc., a manufacturer of construction and mining equipment, engines, and gas turbines, had most of its value in its plant and equipment. Today, intangible assets account for most of the company's value. Caterpillar's web-based knowledge management system, known as Knowledge Network, has thousands of communities of practice. They range in size from small teams to hundreds of employees worldwide. The communities of practice are useful for employees to gain both explicit and tacit knowledge. They are used to distribute information, post questions, and provide space for reference materials. One community of practice focused on bolted joints and fasteners. This gives specialized engineers who generally work alone in manufacturing facilities the ability to ask other engineers questions or get second opinions on designs and problems. The community of practice has resulted in improved decision making, increased collaboration and teamwork, and better product design and development. For example, members of the Bolted Joints and Fastener

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community and the Dealer Service Training Community saved more than \$1.5 million from online discussions.

Many companies who recognize the value of learning have taken steps to ensure that formal training and employee development is linked to strategic business objectives and goals, use an instructional design process to ensure that these programs are effective, and compares or benchmarks the company's programs against its competitors or other companies in the industry.9

Consider the role of learning at PricewaterhouseCoopers. 10 Its Learning and Education (L&E) team was restructured to better link it to the business goals related to value and impact. L&E works with the business to understand what it wants education to be. It ensures ongoing innovation in training delivery and instructional methods by evaluating emerging technologies and using them in small pilot projects. The chief learning officer in charge of L&E is a member of the company's leadership team, which gives that individual the opportunity to discuss ideas regarding training methods, delivery, and content with other top-level managers. L&E sponsors traditional and virtual classroom courses, self-study, team-based learning, action learning projects, coaching and mentoring, and conferences, and it has served more than 150,000 users each year, with over 6,000 courses, 12,000 classroom-based training sessions, and 19,000 web-based training sessions.

PricewaterhouseCoopers uses a learning management system to create a single access point for training activities. To help employees learn on an as-needed basis, the company's e-learning includes video and audio conferencing, virtual classrooms, and webcasting. To evaluate the success of training, L&E considers its influence on outcomes, such as retention of top people. Also, focus groups are used to determine whether trainees and managers are satisfied with the training. A program on sustainability was designed to help partners understand how to provide solutions for their clients. The company's investment in the program has paid off. The company believes that it has achieved a return on investment of more than 1,000 percent in new business sold and reputation gains in the marketplace. In the future, L&E plans to further strengthen the relationship between training, development, and the business by focusing on how it can make learning even more accessible and closer to the point where employees need it. L&E wants to integrate learning and knowledge to speed employees' development and improve their competencies.

This discussion is not meant to underestimate the importance of "traditional training" (a focus on acquisition of knowledge, skills, and abilities), but it should alert you that for many companies, training is evolving from a focus on skills to an emphasis on continuous learning and creating and sharing knowledge. This evolution of training is discussed in Chapter Two.

DESIGNING EFFECTIVE TRAINING

The training design process refers to a systematic approach for developing training programs. Figure 1.2 presents the seven steps in this process. Step 1 is a needs assessment, which is necessary to identify whether training is needed. Step 2 is to ensure that employees have the motivation and basic skills necessary to master the training content. Step 3 is to create a learning environment that has the features necessary for learning to occur. Step 4 is to ensure that trainees apply the training content to their jobs. This step 5 million

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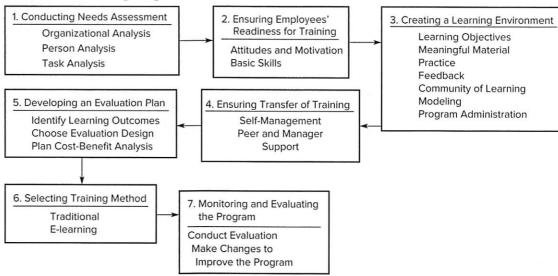
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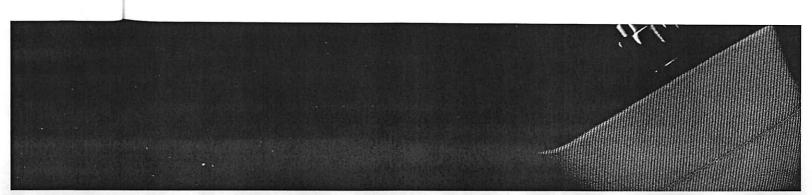


involves having the trainee understand how to manage skill improvement, as well as getting co-worker and manager support.

Step 5 is to develop an evaluation plan. Developing an evaluation plan includes identifying what types of outcomes training is expected to influence (for example, learning, behavior, or skills), choosing an evaluation design that allows you to determine the influence of training on these outcomes, and planning how to demonstrate how training affects the "bottom line" (that is, using a cost-benefit analysis to determine the monetary benefits resulting from training). Step 6 is to choose the training method based on the learning objectives and learning environment. This step may include a traditional training method of face-to-face interaction with a trainer or e-learning using web-based training or mobile learning. Step 7 is to evaluate the program and make changes in it or revisit any of the earlier steps in the process to improve the program so that learning, behavior, change, and other learning objectives are obtained.

The training design process shown in Figure 1.1 is based on principles of Instructional System Design. Instructional System Design (ISD) refers to a process for designing and developing training programs. There is not one universally accepted instructional systems development model. The training design process sometimes is referred to as the ADDIE model because it includes analysis, design, development, implementation, and evaluation. 11 In Figure 1.1, Step 1, conducting needs assessment, and Step 2, ensuring employees' readiness for training, are related to analysis. The next three steps—creating a learning environment, ensuring transfer of training, and developing an evaluation plan are design issues. Step 6, selecting and using a training method, relates to implementation. Step 7, monitoring and evaluating the program, relates to evaluation. Regardless of the specific ISD approach used, all share the following assumptions: 12

Training design is effective only if it helps employees reach instructional or training goals and objectives.



- Measurable learning objectives should be identified before the training program begins.
- Evaluation plays an important part in planning and choosing a training method, monitoring the training program, and suggesting changes to the training design process.

Trainers for AbsorbU, the internal college for ITU AbsorbTech, an industrial laundry service company, design courses using the ADDIE model. ¹³ AbsorbU focuses on learning needs related to customer service, production, leadership, and sales. They find that using the ADDIE model helps them to identify training needs and desired results and focus attention on knowledge transfer or behavior change. Also, they use ADDIE when they are revisiting courses to review them and ensure that the content remains useful.

Overcoming the Flaws of the ISD Model

Some training professionals argue that the ISD model is flawed for several reasons. ¹⁴ First, in organizations, the training design process rarely follows the neat, orderly, step-by-step approach of activities shown in Figure 1.1. Second, in trying to standardize their own ISD method used in the training function, some organizations require trainers to provide detailed documents of each activity found in the model. This adds time and cost to developing a training program. Third, the ISD implies an end point: evaluation. However, good instructional design requires an iterative process of design, execution, evaluation, and reconsideration of the needs that the program was designed to meet, as well as the learning environment, the transfer of training, and all the other activities in the ISD process. Fourth, many companies claim to use an instructional design approach but dilute its application. 15 This might include assuming that training is the best solution without investigating other causes for performance gaps, failing to identify training objectives and results, focusing too much on the training method while ignoring the role of the work environment in transfer of training, and concentrating evaluation on whether trainees liked the program rather than on measuring the impact of training on job performance or business results. Despite these criticisms, use of the ISD process is the best way to help ensure the effectiveness of training and development.

The training design process should be systematic, yet flexible enough to adapt to business needs. Different steps may be completed simultaneously. For example, a business leader who was an important stakeholder at Deloitte wanted a training module for new employees on how to deliver exceptional customer service to be quickly redesigned.¹⁶ The fast turn-around time was necessary because of its business implications. Many new employees hired each week needed to understand how to provide customer service the Deloitte way. Three teams of talent development professionals were each given the same set of learning objectives to create a revised program. Throughout the process they exchanged and critiqued each other's ideas. At the end of the day the ideas for the revised program were presented to the business leader. The business leader reviewed the teams' recommendations and agreed that hybrid course design based on two of the teams' recommendations would be the best solution. Keep in mind that designing training unsystematically will reduce the benefits that can be realized. For example, choosing a training method before determining training needs or ensuring employees' readiness for training increases the risk that the method chosen will not be the most effective one for meeting training needs. Also, training may not even be necessary and may result in a waste of time

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to busiousiness for new igned.16 iny new vice the ne same hey exrevised : teams' recomsystemtraining training meeting of time and money. Employees may have the knowledge, skills, or behavior they need but simply not be motivated to use them.

The introduction of new technologies such as mobile learning (discussed in Chapter Eight) highlights a shift from trainees having to learn from an instructor in one location to trainees learning independently and not being bound to learn in the workplace. Still, good training design requires determining the trainees' needs, identifying resources so that trainees can learn what they need to know, and providing them with access to reference materials and knowledge bases when they encounter problems, issues, or questions on the job. 17

The development of a web-based training program focused on teaching managers the skills needed to run effective business meetings provides a good example of the instructional design process. The first step of the process, needs assessment, involved determining that managers lacked skills for conducting effective meetings and helped to identify the type of meetings that managers were involved in. The needs assessment process involved interviewing managers and observing meetings. The needs assessment process also identified the most appropriate training method.

Because the managers were geographically dispersed and had easy access to computers, and because the company wanted a self-directed, self-paced program that the managers could complete during free time in their work schedule, the training designers and company management decided that web-based training was the appropriate method. Because training was going to be conducted over the web, the designers had to be sure that managers could access the web and were familiar with tools for using it (e.g., web browsers). This relates to determining the managers' readiness for training.

The next step was to create a positive learning environment on the web. Designers made sure that the program objectives were clearly stated to the trainees and provided opportunities within the program for exercises and feedback. For example, trainees were asked to prepare an outline for the steps they would take to conduct an effective meeting. The designers built into the program a feedback system that indicated to the managers which of the steps they outlined were correct and which needed to be changed. The designers also included assessment tests that allowed the trainees to receive feedback through the program and to skip ahead or return to earlier material based on their scores on the tests. The assessment included a test of meeting skills that the managers completed both prior to and after completing the program. The assessment tests were stored in a data bank that the company could use to evaluate whether trainees' meeting skills improved from pretraining levels.

THE FORCES INFLUENCING WORKING AND LEARNING

Table 1.1 illustrates the forces that are influencing working and learning. Globalization of business, demographic changes, new technologies, and economic changes are several of the forces shown in Table 1.1 that influence all aspects of our lives: how we purchase products and services, how we learn, how we communicate with each other, and what we value in our lives and on the job. 18 These forces are affecting individuals, communities, businesses, and society. To survive, companies must address these forces—with training playing an important role.

TABLE 1.1 Forces Influencing Working and Learning

Economic cycles
Globalization
Increased value placed on intangible assets and human capital
Focus on link to business strategy
Changing demographics and diversity of the workforce
Talent management
Customer service and quality emphasis
New technology
High-performance work systems

Economic Cycles

It is important to recognize that regardless of the current economic cycle, training has been shown to positively contribute to the company's performance. For example, companies that used more selective staffing and training before the recession outproduced and had better performance than competitors before the economic recession of 2009 and recovered more quickly. ¹⁹

Today, there are many positive signs that the U.S. economy is experiencing positive momentum.²⁰ Employers are adding jobs at the fastest rate since the late 1990s. The unemployment rate was 5.5 percent in February 2015, the lowest in seven years. Consumer spending benefited from steady job growth, and lower gasoline prices rose in the fourth quarter of 2014 at the fastest rate since the first quarter of 2006.²¹ Growth in the gross domestic product (GDP) was 2.4 percent higher than the increase in 2013, and U.S. manufacturing output moved past its prerecession levels. Surveys suggest that company CEOs are optimistic about the U.S. economy's growth prospects.²² Hiring continues to be a priority for CEOs with two-thirds planning to add new employees in the next year.

However, there are several threats to continued economic growth.²³ Despite the low unemployment rate, employee's pay is slowly increasing, which can ultimately result in reduced consumer spending. Broader measures of unemployment including the numbers of involuntary part-time employees and long-term unemployed were down during 2014, but still higher than before the recession. Also, there are concerns that the Federal Reserve Bank will begin to raise the borrowing rate for federal funds, which has been near zero since the end of 2008. The lowest fund rate in history was provided as an emergency measure during the financial crisis several years ago, but the economy hasn't shown that it can grow without it. A fund rate hike could affect growth, inflation, and exchange rates throughout the world.

Despite companies looking to add new employees to expand operations, replace retiring employees, or keep up with increased demand for their products and services, many companies may be unable to find new employees with the skills they need. Also, valuable high-performing employees may be looking to change jobs for higher wages or better career opportunities. As a result, companies are having problems attracting and retaining talented employees and are looking to training as part of the solution. For example, Panera Bread, Walmart, Starbucks, and Aetna all raised employees' pay. In addition to raising pay, Starbucks has focused on learning as a way to attract and retain employees and show it is committed to their success. Starbucks College Achievement Plan pays employees' tuition for an online bachelor's degree from Arizona State University. Employees can choose

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from forty degree programs. The only requirements are that employees have to be working at least twenty hours each week; are U.S.-based working in support centers, plants, or at any of company-operated stores (including Teavana, La Boulange, Evolution Fresh, and Seattle's Best Coffee stores); and do not yet have a bachelor's degree. Employees admitted to Arizona State as a junior or senior will earn full tuition reimbursement for each year of coursework they complete toward a bachelor's degree. Those admitted as freshmen and sophomores will receive a partial scholarship and need-based financial aid toward the completing their degree. Employees have no commitment to remain at Starbucks after they graduate.

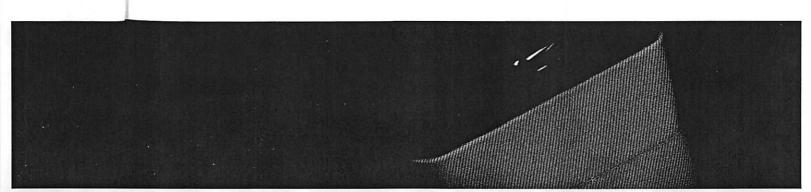
Globalization

Every business must be prepared to deal with the global economy. Global business expansion has been made easier by technology. The Internet allows data and information to be instantly accessible and sent around the world. The Internet, e-mail, and video conferencing enable business deals to be completed between companies thousands of miles apart.

Globalization is not limited to any particular sector of the economy, product market, or company size.²⁶ Companies without international operations may buy or use goods that have been produced overseas, hire employees with diverse backgrounds, or compete with foreign-owned companies operating within the United States. Globalization is also likely to increase as major opportunities to expand into new markets grow due to the increasing number of consumers overseas who have products and services and the income to buy them.

One estimate is that developing economies and emerging markets such as those found in the BRIC nations (Brazil, Russia, India, and China) are responsible for 19 percent of the world's economy.²⁷ Other countries such as Indonesia, Malaysia, Kenya, Columbia, and Poland which have a growing middle class, strong infrastructure, business-friendly regulations, and stable governments are likely new emerging markets. The importance of globalization is seen in recent hiring patterns of large U.S. multinational corporations who have increased their overseas workforce, particularly in Asia.²⁸ For example, Oracle, the business hardware and software developer, added workers overseas resulting in over 60 percent of its employees located outside the United States. Markets in Brazil, China, and India have resulted in 60 percent of General Electric's business outside the United States, with over half of its employees being located overseas. Clothing retailer Gap Inc Clothing retailer Gap Inc., opened its first company-owned store in China in 2010.²⁹ It has stores in forty-eight countries, including Asia, Australia, Eastern Europe, Latin America, the Middle East, and Africa. Banana Republic, a Gap Inc. company, recently expanded to important cities for fashions, including Ginza, Paris, and Milan. Coca-Cola operates in more than two hundred countries. Coke recently opened its forty-third production facility in China and plans to invest \$5 billion in Africa over the next six years. 30 Coke also plans to open its first bottling plant in Myanmar, which will create thousands of jobs over the next five years. Gap believes it needs to continue to expand its international presence because the U.S. market is maturing and has many competitors. Yum! Brands, the parent company of KFC, Pizza Hut and Taco Bell, has over 6,200 stores in China contributing over 50 percent of the company's profits.31

Global companies are struggling both to find and retain talented employees, especially in emerging markets. Companies are moving into China, India, Eastern Europe, the Middle



East, Southeast Asia, and Latin America, but the demand for talented employees exceeds the supply. Also, companies often place successful U.S. managers in charge of overseas operations, but they lack the cultural understanding necessary to attract, motivate, and retain talented employees. To cope with these problems, companies are taking actions to better prepare their managers and their families for overseas assignments and to ensure that training and development opportunities are available for global employees. Cross-cultural training prepares employees and their families to understand the culture and norms of the country to which they are being relocated and assists in their return to their home country after the assignment. Cross-cultural training is discussed in Chapter Ten.

McDonalds continues to open new stores throughout the world.³² It opened its first restaurant in Vietnam in 2014 and is planning to open a store in Kazakhstan in 2015. The Vietnam store is the 10,000th restaurant for McDonalds in Asia, Pacific, Middle East, and Africa. Kazakhstan is McDonalds 120th global market! To train future managers in store operations, leadership, and staff management skills needed for global expansion to be successful, McDonalds has seven Hamburger Universities in the United States and abroad, including campuses at Oak Brook, Illinois; Sydney; Munich, Germany; London, England; Tokyo, Japan; São Paulo, Brazil; and Shanghai, China. All provide training materials and tools that can be used in different languages and cultures.

IBM obtains more than two-thirds of its revenue from outside the United States and is seeking to build team leadership in order to compete in emerging markets around the world. IBM's Corporate Service Program has donated the time and services of about 600 employees for over 1,000 projects in countries such as Turkey, Romania, Ghana, Vietnam, the Phillipines, and Tanzania. 33 The goal of the program is to develop a leadership team to learn about the needs and the culture of these countries while at the same time providing valuable community service. For example, eight IBM employees from five countries traveled to Timisoara, Romania. Each employee was assigned to help a different company or nonprofit organization. One software-development manager helped GreenForest, a manufacturer of office, hotel, school, and industrial furniture, reach its goal of cutting costs and becoming more efficient by recommending the computer equipment and systems needed to increase production and exports to Western Europe. Another employee worked with a nonprofit organization that offers services to disabled adults. Besides benefiting the companies, the employees also found that the experience helped them understand cultural differences, improve their communication and teamwork skills, and gain insight into global marketing and strategy.

Globalization also means that employees working in the United States will come from other countries. One estimate is that immigrants, some of whom are illegal, will account for an additional million persons in the workforce.³⁴ Immigrants provide scientific talent and also sometimes fill low-wage jobs. The impact of immigration is especially large in certain areas of the United States, including the states on the Pacific Coast, where 70 percent of new entrants to the workforce are immigrants.³⁵ U.S. colleges cannot keep up with the demand for engineers. To find engineers, companies have to look overseas to China, Japan, Korea, and India to hire them.³⁶ The H-1B visa program is for persons in highly skilled and technical occupations requiring completion of higher education. New visas are capped at 65,000 per year, 20,000 of which are reserved for employees with U.S. master's degrees. There is no cap on H-1Bs for employees working for the government, universities, and other nonprofit institutions. The largest number of H1-B visas are issued

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for computer-related occupations (43 percent). U.S.-based Microsoft and Intel are two of the top ten companies using H-1B visas, but most are used by Indian companies such as Tata Consultancy Services and Wipro Ltd. 37 Other visa programs are available for lowerskilled temporary or seasonal workers (H2-A, H2-B). Many of these immigrants will have to be trained to understand the U.S. culture. U.S. employees will need skills to improve their ability to communicate with employees from different cultures.

Globalization also means that U.S. companies have to carefully consider the costs and benefits of moving jobs overseas or using foreign suppliers. The United States lost six million factory jobs between 1998 and 2010. However, since 2010 the United States has added millions of factory jobs.³⁸ Offshoring refers to the process of moving jobs from the United States to other locations in the world. The reasons given for offshoring factory and other jobs often include lower labor costs and the availability of a skilled workforce with a strong work ethic. However, many companies are deciding to keep their factory work in the United States rather than send it offshore. This is occurring for several reasons, including higher product shipping costs, fear of supply chain disruptions due to natural disasters and political instability, quality concerns, and customer preference for U.S.-made products.³⁹ Also, rising labor costs in some countries, such as China, are becoming more comparable to those in the United States. Finally, some countries' local standards for safety, health, and working conditions may be substantially lower than in the United States, resulting in negative publicity and turning off potential customers. For example, Hanesbrands has added workers to a plant in North Carolina. 40 The socks are knitted there and then sent to a plant in El Salvador that sews, dyes, and packages the socks. Although El Salvador has the advantage on labor costs, electricity costs in North Carolina were much less. Also, having plants in both places also provides a backup in case of problems. Peds Legwear also makes socks in North Carolina allowing the company to avoid import taxes, cut shipping costs, and respond faster to shifts in demand. Plus, selling socks made in the United States was a major reason why Walmart contracted with the company. Apple is known for introducing revolutionary and functional products such as the iPhone, Mac Air computers, and the iPad. 41 Apple relies on manufacturing partners in Asia to build its products. Apple Inc. has been criticized by labor groups who have challenged how its manufacturing partners in Asia have treated their employees. Apple has taken these criticism seriously and is auditing its suppliers and manufacturing facilities to take steps to reduce, if not eliminate, illegal and poor treatment of workers who assemble or provide materials for any of its products. Apple is especially focused on ensuring that its partners don't hire underage workers, provide adequate training, and pay fair wages. In those cases in which Apple's recommendations based on its audits were not adopted, the company terminated its relationship with the supplier.

Increased Value Placed on Intangible Assets and Human Capital

Training and development can help a company's competitiveness by directly increasing the company's value through contributing to intangible assets. A company's value includes three types of assets that are critical for the company to provide goods and services: financial assets (cash and securities), physical assets (property, plant, equipment), and intangible assets. Table 1.2 provides examples of intangible assets, which consist of human capital, customer capital, social capital, and intellectual capital. Human capital refers to

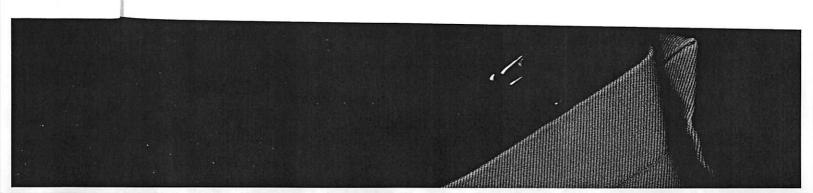


TABLE 1.2 Examples of Intangible Assets

Sources: Based on L. Weatherly. Human Capital-The Elusive Asset (Alexandria, VA: SHRM Research Quarterly, 2003); E. Holton and S. Naquin, "New Metrics for Employee Development," Performance Improvement Quarterly 17 (2004): 56-80: M. Huselid, B. Becker, and R. Beatty, The Workforce Scorecard (Boston, MA: Harvard University Press, 2005).

Human Capital

- Tacit knowledge
- Education
- Work-related know-how
- Work-related competence

Customer Capital

- Customer relationships
- Brands
- Customer loyalty
- Distribution channels

Social Capital

- Corporate culture
- Management philosophy
- Management practices
- Informal networking systems
- Coaching/mentoring relationships

Intellectual Capital

- Patents
- Copyrights
- Trade secrets
- Intellectual property

the sum of the attributes, life experiences, knowledge, inventiveness, energy, and enthusiasm that the company's employees invest in their work.⁴² Intellectual capital refers to the codified knowledge that exists in a company. Social capital refers to relationships in the company. Customer capital refers to the value of relationships with persons or other organizations outside the company for accomplishing the goals of the company (e.g., relationships with suppliers, customers, vendors, and government agencies). Intangible assets are equally as valuable as financial and physical assets, but they are not something that can be touched and they are nonmonetary.

Intangible assets have been shown to be responsible for a company's competitive advantage. Several studies show that investments in training and development lead to increases in financial performance, productivity, and innovation. 43 The American Society for Training and Development (ASTD) found that companies that invested the most in training and development had a shareholder return that was 86 percent higher than companies in the bottom half and 46 percent higher than the market average. 44 Training and development have a direct influence on human and social capital because they affect education, work-related know-how and competence, and work relationships. Training and development can have an indirect influence on customer and social capital by helping employees better serve customers and by providing them with the knowledge needed to create patents and intellectual property.

As mentioned earlier in the chapter, intangible assets such as human capital also contribute to a company's competitive advantage because they are difficult to duplicate or imitate. 45 For example, consider companies in the airline industry. Southwest Airlines is consistently profitable and usually ranks high in on-time arrivals and other indicators

of airline success. 46 One of the distinctions between Southwest Airlines and its competitors is how it treats its employees. For example, Southwest has a policy of no layoffs and was able to maintain this record even during the difficult time for airlines following 9/11. Southwest also emphasizes training and development, which provide its employees with skills to perform multiple jobs. This benefit allows Southwest airplanes to be cleaned and serviced at airports quickly because employees have multiple skill sets that can be applied to various aspects of readying an aircraft for departure. As a result of these human resource policies, Southwest employees are loyal, productive, and flexible (which contributes to the success of the airline). Other airlines may have similar or greater levels of financial assets and may have physical assets that are comparable to Southwest's (e.g., same type of airplanes, similar gates), but what contributes to Southwest's success and gives the company a competitive advantage are its intangible assets in the form of human capital. American Airlines and United Airlines have similar (or greater!) financial and physical assets but have not been successful in competing with Southwest by offering flights on the same routes.

Consider the effort that Macy's is undertaking to develop human capital, social capital, and customer capital.⁴⁷ Almost half of customer complaints at Macy's department stores are focused on interactions with sales associates. To cut costs to survive during the recession, Macy's closed stores and invested in technology to improve efficiency, which diverted attention away from customer service. But now Macy's is making a considerable investment in training its sales associates to provide better customer service and to help the company to meet sales growth targets. The new training program requires new sales associates to attend a three-hour training session and includes refresher courses and coaching from managers when they are working on the sales floor. The "MAGIC Selling Program" ("MAGIC" stands for meet and make a connection, ask questions and listen, give options and advice, inspire to buy, and celebrate the purchase) is designed to help sales associates make more personal connections with shoppers. Positive interactions with sales associates contribute to the number of items that a customer purchases and can help enhance Macy's service reputation as customers share experiences on social network sites such as Twitter and Facebook.

Chapters Seven, Eight, and Nine discuss specific training and development activities that contribute to the development of human and social capital. How to measure human capital is explained in Chapter Six, "Training Evaluation." The value of intangible assets and human capital has three important implications:

- 1. A focus on knowledge workers,
- 2. Employee engagement, and
- 3. An increased emphasis on adapting to change and continuous learning.

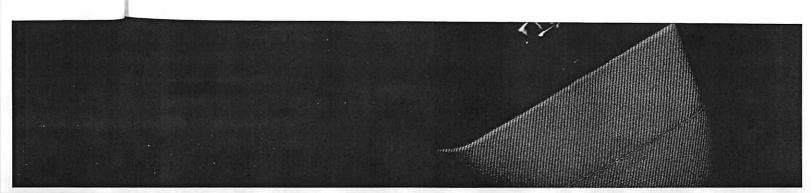
Focus on Knowledge Workers

One way that a company can increase its intangible assets, specifically human capital, is by focusing on attracting, developing, and retaining knowledge workers. Knowledge workers are employees who contribute to the company not through manual labor, but through what they know, perhaps about customers or a specialized body of knowledge. Employees cannot simply be ordered to perform tasks; they must share knowledge and collaborate on solutions. Knowledge workers contribute specialized knowledge that their managers may

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not have, such as information about customers, and managers depend on these knowledge workers to share that information. Knowledge workers have many job opportunities. If they choose, they can leave a company and take their knowledge to a competitor. Knowledge workers are in demand because of the growth of jobs requiring them.

Employee Engagement

To fully benefit from employee knowledge requires a management style that focuses on engaging employees. **Employee engagement** refers to the degree to which employees are fully involved in their work and the strength of their commitment to their job and the company. Employees who are engaged in their work and committed to their companies give those companies a competitive advantage, including higher productivity, better customer service, and lower turnover.

Perhaps the best way to understand engagement is to consider how companies measure employee engagement. Companies measure employees' engagement levels with attitude or opinion surveys. Although the types of questions asked on these surveys vary from company to company, research suggests the questions generally measure themes such as pride in the company, satisfaction with the job, prospects for future growth with the company, and opportunity to perform challenging work. ⁴⁹ How do we know if an employee is engaged? An engaged employee is passionate about their work, is committed to the company and its mission, and works hard to contribute. Engagement survey results show that only 30 percent of U.S. employees are engaged in their work, 52 percent are not engaged, and 18 percent are actively disengaged. ⁵⁰ Actively disengaged employees cost the United States billions of dollars every year in lost productivity.

For example, Bridgepoint Education, a for-profit education services holding company, recognizes that employee engagement is necessary for success.⁵¹ To increase employee engagement, the company uses events, celebrations, and a social learning platform to facilitate conversations between employees and their managers. For example, company leaders host discussions with employees, communicate goals, and give employees a chance to ask questions. The results of Satellite Healthcare's, a renal care provider, engagement survey showed that employees want more resources supporting their career development.⁵² As a result, Satellite developed a Career Pyramid that defines the positions within a dialysis career category including the position titles from entry-level jobs to top management. The education, experience, and competencies for each position are listed. Standards for promotion and development to advance to each level on the pyramid are provided. The Career Pyramid is especially useful for employees in entry-level jobs such as patient care technicians because it provides a clear structure on possible career moves and the skills that employees need to develop. Employee engagement scores collected after the Career Pyramid was implemented have improved and 92 percent of employees report they expect to have a long-term career with Satellite. At Mohawk Industries, a company that provides carpet and rugs for residential and commercial customers, each employee has a card that lists their development goals and the business goals. These cards help employees have conversations with their managers to ensure personal and business goals are aligned.⁵³ At LifeGift, a Houston-based nonprofit that recovers human organs and tissues from recently deceased donors and matches them to transplant recipients across the United States, engagement means having employees who never give up on finding a donor.⁵⁴ LifeGift's CEO, made employee engagement a priority and started measuring engagement annually starting in 2008. When

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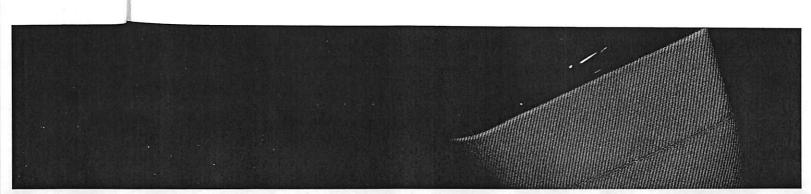
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company, employee n to faciliny leaders nce to ask ent survey ent.52 As a ialysis cament. The or promohe Career care techskills that reer Pyraexpect to vides card that lists conversa-LifeGift, a ceased doent means employee 008. When engagement fell in the last survey, Holtzman required the company managers to hold quarterly one-on-one discussions with each of their employees, separate from annual evaluations. Results from the surveys and discussions ensure that employees receive the training, emotional support, and other resources needed to deal with the demands of the job. Most companies do not deal with life-or-death issues as LifeGift does, but focusing on employee engagement can ensure that employees are satisfied and productive.

Change and Continuous Learning

In addition to acquiring and retaining knowledge workers, companies need to be able to adapt to change. Change refers to the adoption of a new idea or behavior by a company. Technological advances, changes in the workforce or government regulations, globalization, and new competitors are among the many factors that require companies to change. Change is inevitable in companies as products, companies, and entire industries experience shorter life cycles.⁵⁵ For example, every aspect of Capital BlueCross is changing due to health-care reform. 56 The company's leadership development curriculum helps prepare leaders at all levels of the company to deal with these changes. It includes providing each leader with a coach who reinforces what was learned in the curriculum and tailors it to the individual strengths and challenges of each learner. Each leader also shares what they learned with the employees who report to them. Hu-Friedy, a company that manufactures dental instruments, employs 750 employees.⁵⁷ Hu-Friedy is spending \$60,000 on an apprenticeship program to develop its employees' skills. Many of employees have worked on the factory floor making instruments for years but don't have the complex understanding of heat treatment, metallurgy, and metal composition necessary for making improvements to the company's products and production processes. Hu-Friedy hopes the apprenticeship program will help keep production work in the United States and keep the company competitive. The characteristics of an effective change process are discussed in Chapter Two, "Strategic Training."

A changing environment means that all employees must embrace a philosophy of learning. A learning organization embraces a culture of lifelong learning, enabling all employees to acquire and share knowledge continually. Improvements in product or service quality do not stop when formal training is completed.⁵⁸ Employees need to have the financial, time, and content resources (such as courses, experiences, and development opportunities) available to increase their knowledge. Managers take an active role in identifying training needs and helping to ensure that employees use training in their work. Also, employees are actively encouraged to share knowledge with colleagues and other work groups across the company using e-mail and the Internet.⁵⁹ At The Cheesecake Factory Inc., which operates about 160 restaurants in the United States, learning is less about formal programs and courses and more about being available on an as-needed basis, driven by employees. 60 The company is focused on fostering continuous learning related to guest satisfaction and perfect execution of the many dishes on its menu. To do so, the company is creating interactive learning content that employees access at work. Through the VideoCafe, employees can upload and share short videos on topics such as customer greetings and food preparation. The company plans to develop interactive games, including a simulation for building the perfect hamburger. Hands-on, employee-driven learning is supported by managers observing employees and providing coaching and feedback to help develop new skills and reinforce their use in the workplace. Chapter Five, "Program Design," discusses



learning organizations and knowledge management in detail. For a learning organization to be successful, teams of employees must collaborate to meet customer needs. Managers need to empower employees to share knowledge, identify problems, and make decisions, which allows the company to experiment and improve continuously.

Social collaboration and social networking technology are helping employees share knowledge and contribute to the development of a learning organization. CareSource uses wikis, websites with content created by users, and discussion boards to encourage employees to engage in critical thinking and learn from each other by sharing ideas about how to apply skills that they have acquired in formal training programs. Coldwell Banker encourages its real estate professionals to develop and share videos of the best sales techniques using the company's video portal. Coldwell Banker also uses communities of practice to encourage employees to share best practices and provide insights on how to best approach specific types of job assignments. inVentiv Health, Inc. uses tools on Facebook to help sales employees share information and update lessons learned.

Focus on Links to Business Strategy

Given the important role that intangible assets and human capital play in a company's competitiveness, managers are beginning to see a more important role for training and development as a means to support a company's business strategy; that is, its plans for meeting broad goals such as profitability, market share, and quality. Managers expect training and development professionals to design and develop learning activities that will help the company successfully implement its strategy and reach business goals. Strategic training will be discussed in greater detail in Chapter Two.

Changing Demographics and Diversity of the Workforce

In the United States the Bureau of Labor Statistics (BLS), an agency of the Department of Labor, tracks changes in the composition of the U.S. labor force and forecasts trends. Companies face several challenges as a result of increased demographics and diversity of the workforce. Population is the single most important factor in determining the size and composition of the labor force, which is composed of people who are either working or looking for work. The civilian labor force is projected to increase by 18 million between 2012 and 2022, reaching 163 million by 2022. The workforce will be older and more culturally diverse than at any time in the past 40 years.

Increase in Ethnic and Racial Diversity

Between 2012 and 2022, the U.S. labor force will continue to grow more ethnically and racially diverse due to immigration, increased participation of minorities in the workforce, and higher minority fertility rates. Between 2012 and 2022, the projected annual growth rates for Hispanics (2.5 percent) and "other groups" (which includes individuals of multiple racial origin, American Indians and Alaska Natives, and Native Hawaiians) (2.7 percent) are higher than for African Americans and other groups. ⁶³ By 2022, the workforce is projected to be 78 percent white, 12 percent African American, and 6 percent Asian and 2 percent other ethnic or cultural groups. By 2022, 53 percent of the labor force will be men and 47 percent will be women. Not only must companies face the issues of race, gender, ethnicity, and nationality to provide a fair workplace, but they must also develop training programs to help immigrants acquire the technical and customer service skills required in a service economy.

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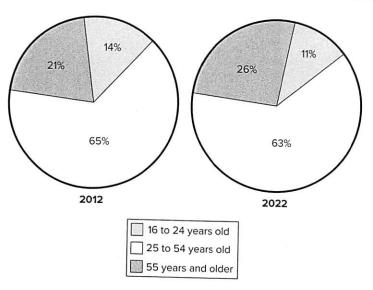
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FIGURE 1.3 Comparison of the Age of the 2012 and 2022 Labor Force.

Source: Based on Bureau of Labor Statistics, U.S. Department of Labor, Employment Projections: 2012-2022, News Release. December 19th, 2013, from www.bls.gov/emp, accessed February 25. 2015.



Aging Workforce

Figure 1.3 compares the projected distribution of the age of the workforce in 2012 and 2022. In 2018, baby boomers will be 57 to 70 years old, and this age group will grow significantly between 2012 and 2022. The labor force will continue to age. The 55-andolder age group is expected to grow by approximately 12 million to 42 million in 2022, representing a 29 percent increase between 2012 and 2022. This 12 million is nearly all of the 8.5 million workers who are projected to be added to the workforce by 2022.64 The labor force participation of those 55 years and older is expected to grow because older individuals are leading healthier and longer lives than in the past, providing the opportunity to work more years. In addition, the high cost of health insurance and decrease in health benefits will cause many employees to keep working to maintain their employerbased insurance or will prompt them to return to work after retirement to obtain health insurance through their employer. Also, the trend toward pension plans based on individuals' contributions to them rather than on years of service, will provide yet another incentive for older employees to continue working.

The aging population means that companies are likely to employ a growing share of older workers-many of them in their second or third careers. Older people want to work, and many say they plan a working retirement. Despite myths to the contrary, worker performance and learning in most jobs is not adversely affected by aging. 65 Older employees are willing and able to learn new technology. An emerging trend is for qualified older employees to ask to work part-time, or for only a few months at a time, as a means of transitioning to retirement. Employees and companies are redefining what it means to be retired to include second careers, as well as part-time and temporary work assignments.

Generational Differences

Five generations are represented in the workforce, each one with unique and similar characteristics to the others. In Table 1.3, the year born, nicknames, and ages of each generation are shown. Consider some of the attributes that are believed to characterize each

TABLE 1.3 Generations in the Workforce

Year Born	Generation	Ages
1925-45	Traditionalists	>69
	Silent generation	
1946-64	Baby boomers	51-69
1965-80	Generation X	35–50
1981–95	Millennials	20-34
	Generation Y	
	Echo boomers	
1996–	Generation Z	<20
	Digital natives	

generation. 66 For example, millennials also known as Generation Y or Echo Boomers, grew up with access to computers at home and school and access to the Internet. They grew up with diversity in their schools and were coached, praised, and encouraged for participation rather than accomplishment by their baby boomer parents. Millennials are characterized as being optimistic, willing to work and learn, eager to please, self-reliant, globally aware, and value diversity and teamwork. They are also believed to have high levels of self-esteem, to the point of narcissism sometimes.

Generation Xers grew up during a time when the divorce rate doubled, the number of women working outside the home increased, and the personal computer was invented. They were often left to their own devices after school (latchkey kids). They value skepticism, informality, and practicality, seek work-life balance, and dislike close supervision. They tend to be impatient and cynical. They have experienced change in all of their lives (in terms of parents, homes, and cities).

Baby boomers, the "Me" generation, marched against the "establishment" for equal rights and an end to the Vietnam War. They value social conscientiousness and independence. They are competitive, hardworking, and concerned with the fair treatment of all employees. They are often considered to be workaholics and rigid in conforming to rules.

Traditionalists or the Silent Generation grew up during the Great Depression and lived during World War II. They tend to value frugality, are patriotic and loyal, adhere to rules, loyal to employers, and take responsibility and sacrifice for the good of the company.

It is important to note that although generation differences likely exist, members of the same generations are no more alike than members of the same gender or race. Research suggests that different generations of employees have similarities as well as differences.⁶⁷ Differences in work ethic have been found between baby boomers, Generation Xers, and millennials. However, millennial employees are more similar than different from other generations in their work beliefs, job values, and gender beliefs. The lack of study of generational differences over time, the inability of most studies to separate generational effects from age or life stage, and possible differences across generation in how they interpret survey items used in studies means that you should be cautious in attributing differences in employee behaviors and attitudes to generational differences. ⁶⁸ Also, treating employees differently based on their age, such as only inviting younger employees to attend training or development programs, may result in adverse legal consequences

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(e.g., employees forty years or older are covered by the Age Discrimination in Employment Act).

Nonetheless, members of each generation may have misperceptions of each other, causing tensions and misunderstanding in the workplace. ⁶⁹ For example, millennials may think Generation X managers are bitter, jaded, abrasive, uninterested in them, and poor delegators. In turn, their Generation X managers consider millennials too needy for attention, demanding, and overly self-confident. Millennials might believe that baby boomers are too rigid and follow company rules too closely. They believe that employees in the older generations have been too slow to adopt social media tools and value tenure over knowledge and performance. Traditionalists and baby boomers believe that millennials don't have a strong work ethic because they are too concerned with work-life balance. Also, members of the younger generations may resent baby boomers and traditionalists who are working longer before retiring, thus blocking promotions and career moves for younger workers. We will discuss the potential implications of generational differences for training and development in Chapters Four and Five.

Companies can use increased diversity to gain a competitive advantage. A Society for Human Resource Management (SHRM) survey of its members showed that 68 percent have practices to address workplace diversity. 70 Important outcomes expected from diversity practices included improved public image of the company, improved financial bottom line, decreased complaints and litigation, and retention and recruitment of a diverse workforce.

Training plays a key role in ensuring that employees accept and work more effectively with each other. To successfully manage a diverse workforce, managers and employees must be trained in a new set of skills, including:

- 1. Communicating effectively with employees from a wide variety of backgrounds
- 2. Coaching, training, and developing employees of different ages, educational backgrounds, ethnicities, physical abilities, and races
- 3. Providing performance feedback that is free of values and stereotypes based on gender, ethnicity, or physical handicap
- 4. Training managers to recognize and respond to generational differences
- 5. Creating a work environment that allows employees of all backgrounds to be creative and innovative.⁷¹

Consider the programs that several companies are offering to capitalize on older employees' skills and accommodate their needs, provide training and development opportunities that appeal to a diverse workforce, and cope with generational differences. 72 Many of these programs are a part of companies' efforts to manage diversity, which we will discuss in more detail in Chapter Ten. S.C. Johnson offers retirees temporary work assignments, consulting and contract work, telecommuting, and part-time work. Centegra Health System's phased retirement program offers flexible scheduling, including part-time work, compressed workweeks, job sharing, summers off, and long-distance contract work.

CVS/pharmacy has stories in every climate and region in the United States. CVS created its Snowbirds Program to allow older employees to move among locations according to their preferences. This is especially important for older employees who spend winters in the

southern states and summer in the northern states. More than 1,000 employees, including retail clerks, pharmacists, and managers, have participated in the program.

Johnson & Johnson's analysis of women's leadership programs showed that, although the company was not experiencing greater turnover of women, it had been ineffective in reaching multicultural women and women of color. The company has since created a program, titled "Crossing the Finish Line," for high-performing, high-potential multicultural women and women of color. The program includes a two-and-a-half day project in which participants have open conversations with their managers and with executives, including the CEO and the vice chair of the company. The program helps Johnson & Johnson identify women who should be given new development opportunities, as well as help them understand that they must be visible, establish networks, and take the initiative to ask for development assignments. Also, the program educates managers about cultural differences and creates an awareness of how an employee's culture might affect his or her career.

Dell Inc., a technology company, provides a course for all of its new managers that includes topics such as leading multigenerational teams and developing connections with the employees who report to them. All successful managers at Dell must have the ability to relate to and motivate a multigenerational workforce, to create teams to work together, and to encourage an entrepreneurial spirit, regardless of what generation the managers come from. Dell also uses employee resource groups for employees to connect, build relationships, and network. For example, the resource group for millennials is called "GenNext." Dell also encourages employees to participate in discussion with managers about new ways to consider where and how work gets done. This allows employees to choose to work remotely and telecommute, which helps them meet their personal needs, yet successfully complete their work.

MasterCard Inc., the credit card company, is now focusing on developing payment and security innovations. The percentage of MasterCard's employees from the millennial generation has grown from 10 percent in 2010 to 38 percent in 2014. As a result, MasterCard created learning programs that are more appealing to the ways that millennials want to learn. For example, an e-learning program that uses gamification and animation was developed to make required information security and compliance training more fun and less dull and boring. Employees take the roles of "superheroes" to prevent security issues such as not opening e-mails that might contain malware. Within the experience employees become characters in the scenario and they have to make important decisions.

Talent Management

Talent management refers to the systematic, planned, and strategic effort by a company to use bundles of human resource management practices, including acquiring and assessing employees, learning and development, performance management, and compensation to attract, retain, develop, and motivate highly skilled employees and managers. Talent management is becoming increasingly more important because of changes in demand for certain occupations and jobs, skill requirements, the anticipated retirement of the baby boomer generation, and the need to develop managerial talent and skills of the next generation of company leaders. Also, the results of surveys suggest that opportunities for career growth, learning, and development, and the performance of exciting and challenging work

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mpany to assessing pensation rs. Talent emand for the baby ext generfor career ging work are some of the most important factors in determining employees' (especially millennials) engagement and commitment to their current employer.⁷⁶

For Cognizant, a global technology solutions company, business is based on knowledge which depends on the skills of its workforce.⁷⁷ Talent development is seen as a strategic business driver. To develop talent, all employees have individual development plans that support their career goals. Learning at Cognizant focuses on building both technical and leadership talent to ensure employees help improve their clients' businesses. Cognizant has several programs to build talent. The Career Architecture program helps employees choose a career track that matches their interests and skills. It helps identify training courses and job rotations that can help employees move along their career track. The Emerging Partners program develops senior account managers and senior delivery managers. The program includes case studies, role-plays, and simulations. More than 100 managers have completed the program and 45 percent have moved within six months into leadership roles involving interactions with clients. Approximately 50.6 million job openings are expected, more than two-thirds from the need to replace workers who retire or leave. Most of the employment growth between 2012 and 2022 is expected to be in service-providing occupations. Employment in construction is the second highest projected employment increase, resulting in 1.6 million new jobs between 2012 and 2022.⁷⁸

Health care and social assistant services, are expected to be one-third of the total projected increase in total employment from 2012 to 2022. This will add 5 million jobs. On the other hand, employment in manufacturing, federal government information, utilities farming, fishing, and forestry occupations is expected to decline. Keep in mind that there are likely some exceptions to these projected trends. Companies that require specialized labor to make industrial lathes, computer chips, and health-care products requiring specialized skills, plan to expand and locate near towns and cities that have such an available workforce.⁷⁹ For example, Greatbatch Inc., which makes medical products, has expanded near Fort Wayne, Indiana, to take advantage of the local workforce's specialized skills.

Table 1.4 shows ten of the thirty fastest-growing occupations projected between 2012 and 2022. Of the thirty fastest-growing occupations, fourteen are related to health care (such as personal care aids, home health aides, genetic counselors, and physical therapists) and five are related to construction (insulation workers, brickmasons and blockmasons, electrical, tile, and marble setters' helpers). The growth in health care reflects the inpatient and outpatient medical care that is needed for the aging U.S. population. The growth in the construction occupation is related to replacement needs, growth in the economy, and the need to repair the aging U.S. infrastructure. Slightly less than two-thirds of the thirty fastest-growing occupations require education beyond high school, i.e., at least an associate's degree or higher. Occupations requiring education beyond high school are expected to grow faster and pay more per year (an estimated \$30,000) than those requiring a high school diploma or less. Occupations that require an apprenticeship for training, including many construction jobs, are projected to grow approximately 22 percent between 2012 and 2022, which is faster than for jobs requiring any other type of on-the-job training.

Retirement of Baby Boomers

As the oldest baby boomers continue to retire in the next several years, the implications for the workforce could be enormous.80 This could hinder prospects for economic growth and

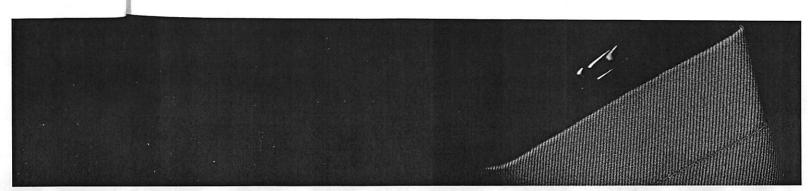


TABLE 1.4 Examples of the Fastest-Growing Occupations

Employment Change 2012–2022					
Occupation	Number (in thousands)	Percent	Most Significant Education or Training		
Industrial-organizational	1-	53	Master's degree		
psychologists			cl		
Personal care aids	581	49	Short-term, on-the-job training		
Home health aids	424	49	Short-term, on-the-job training		
Insulation workers	14	47	Short-term, on-the-job training		
Interpreters and translators	29	46	Bachelor's degree		
Diagnostic medical sonographers	27	46	Associate's degree		
Helpers – Brick, block, and stone masons, tile and marble setters	11	43	Associate's degree		
Occupational therapy assistants	13	43	Associate's degree		
Genetic counselors	1	41	Master's degree		
Physical therapy assistants	29	41	Associate's degree		

Sources: Based on Bureau of Labor Statistics, U.S. Department of Labor, "Employment projections: 2012–2022," News Release, December 19, 2013, from www.bls.gov/emp, accessed February 25, 2015.

put a greater burden on those remaining in the workforce, perhaps forcing them to work longer hours. Especially in occupations with functions less conducive to technology-driven productivity innovations—many jobs in health services and educational services, for example—quality of service may suffer and needs could go unmet unless older workers can be retained or other sources of workers can be found. Even in occupations in which technological innovations have produced relatively large productivity gains—many of the more complex machining jobs in manufacturing, for example—the learning curves often are steep, meaning that new workers need to enter these occupations soon, so they can become proficient in the necessary skills by the time the baby boomers begin leaving the labor force.

It is also important for companies to try to capture the valuable knowledge that is leaving. So Consider how Asian Paints and ConocoPhillips try to capture knowledge. Asian Paints, a paint company in India, encourages employees to use their social network to share best practices and new ways to support dealers. The sales team uses this information to find and apply these practices to current challenges they are facing. This means that when an experienced salesperson retires or leaves the company their knowledge is not lost. ConocoPhillips, a multinational petrochemical company, uses wikis to capture knowledge from all employees including retirees. Many of the company's retirees come back to work part-time. They review the information on the company wiki, identify gaps in missing knowledge, and provide content. Their experiences provide the "how," "what," and "why" that gives context to the wiki content. ConocoPhillips also uses mentoring programs pairing up less-experienced employees with more senior employees to facilitate knowledge sharing.

Skill Requirements

As the occupational structure of the U.S. economy has shifted, skill requirements have changed. 83 The demand for specific skills is being replaced by a need for cognitive



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skills—mathematical and verbal reasoning ability—and interpersonal skills related to being able to work in teams or to interact with "customers" in a service economy (e.g., patients, students, vendors, and suppliers). Cognitive and interpersonal skills are important because in the service-oriented economy, employees must take responsibility for the final product or service. Variety and customization require employees to be creative and good problem solvers. Continuous innovation requires the ability to learn. To offer novelty and entertainment value to customers, workers must be creative. Most companies relate these skills with educational attainment, so many firms use a college degree as a standard to screen prospective employees. Companies also need employees with STEM skills. STEM skills refer to skills in science, technology, engineering, and math.

However, new entrants to the workplace, as well as the unemployed, lack the skills needed for companies to compete in the global economy. Several studies illustrate the skill deficit that U.S. companies are experiencing. Hearly half of CEOs of U.S. businesses believe that a significant skills gap exists that will result in loss of business, revenue, decreased customer satisfaction, or a delay in new products or services. A survey by the Organization for Economic Cooperation and Development found that the United States ranked twenty-one out of twenty-three countries in math and seventeen out of nineteen countries in problem solving. A study by the Manufacturing Institute found that 80 percent of manufacturers report a moderate or serious shortage of qualified applicants for skilled and highly skilled production positions. Skill deficits are not just a problem facing U.S. companies. In Italy and Spain nearly three out of ten adults perform at or below the lowest level of proficiency in both literacy and numerical ability. Countries with developing economies such as India and Russia, as well as Japan and Western Europe, are experiencing difficulties in finding workers for the skilled trades, sales, technicians, engineers, and managers.

Although many businesses plan to hire new employees, they are concerned that they will not be able to find the talent needed to capitalize on investments they are making in new technology and other strategic capabilities. Skill deficits are not limited to any one business sector, industry, or job. As result, companies are partnering with unions, elementary and secondary schools, and colleges and universities to develop these skills in the workforce. For example, an upturn in the construction industry following the recession has resulted in contractors having a difficult time finding the skilled workers they need. As result, local trade unions are advertising apprenticeship programs, which can help train much-needed electricians, plumbers, iron workers, roofers, and pipefitters.

Consider the efforts that Intel, Siemens, and Microsoft are making to develop STEM skills. ⁸⁷ Intel dedicated \$300 million to sponsor classes in schools and universities, with a focus on underserved regions. The money is part of an effort to boost diversity in its workforce and fund recruiting, training, and investments in female and minority start-up businesses. Siemens AG, an engineering company and manufacturer of medical equipment, wanted to expand its energy plant in Charlotte, North Carolina, which would require hiring an additional 1,500 employees. Although over 10,000 job applications were received, most did not have the required STEM skills. As a result, Siemens partnered with a community college in the area to develop a specialized course to prepare potential employees for jobs in the energy plant. Siemens put 3,500 of the 10,000 job applicants through the program. Four hundred were employed by Siemens and the others were encouraged to use

their new STEM skills to find jobs with other companies. Microsoft is developing STEM skills through efforts to ensure that teachers are trained to use technology in the classroom and using Microsoft employees as part-time co-teachers. Microsoft IT Academy provides teachers and students with opportunities to become certified in different types of software, such as Microsoft Office. The exposure the program exposes students to STEM careers that they might not have considered.

Developing Leadership

Companies report that the most important talent management challenges they face are identifying employees with managerial talent and training and developing them for managerial positions.⁸⁸ This is attributed to the aging of the workforce, globalization, and the need for managers to contribute to employee engagement. Executive, administrative, and managerial occupations will experience the greatest turnover due to death or retirement.⁸⁹ Also, many companies do not have employees with the necessary competencies to manage in a global economy. 90 To successfully manage in a global economy, managers need to be self-aware and be able to build international teams, create global management and marketing practices, and interact and manage employees from different cultural backgrounds. Managers contribute to employee engagement by performing basic management functions (planning, organizing, controlling, leading) but also through using good communication skills, helping employees develop, and working collaboratively with employees.

A number of surveys suggest that millennials are interested in opportunities for career progression, including becoming managers and leaders, and they are significantly more likely to want formal leadership development opportunities than employees from other generations. 91 Employees from all generations have strengths and weaknesses in management skills. Millennials are strong in adaptability and customer focus. They are similar to Generation Xers in important leadership and interpersonal skills, including developing others, gaining commitment, and communication. To be effective mangers and leaders, millennials need to develop decision-making and planning and organizing skills and learn how to set high work standards.

As result, many companies including General Electric and Sherwin-Williams are taking steps to retain talented millennials and develop their management skills. 92 For example, General Electric provides job rotation for managers, which helps them gain experience working with different senior managers and different business units. This meets millennials' needs for growth experience and networking while developing skills needed to successfully respond to different types of customers and job challenges. Similarly, Sherwin-Williams, a company that manufactures paint and sells it through its retail stores, recognized that it had been losing its manager trainees at a high rate. Using data collected from surveys and interviews, they found that trainees did not feel included and engaged. To solve this problem, Sherwin-Williams developed a new career-progression model. Performance reviews with manager trainees will occur every six months instead of once at the end of the year, which helps provide them with more feedback and the opportunity to receive pay raises every six months. Also, district managers will conduct regular career discussions with trainees to discuss their long-term goals. During their initial two-year training period new employees will have more opportunities to try different roles in the company, including working with sales representatives and different types of stores, such g STEM lassroom provides software, 1 careers

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iams are lls.92 For ı gain exhis meets Is needed Similarly, ail stores. collected engaged. odel. Perof once at rtunity to lar career two-year les in the ores, such as those specializing in floor coverings and providing commercial services for building contractors.

Customer Service and Quality Emphasis

A company's customers judge its quality and performance. As a result, customer excellence requires attention to product and service features, as well as to interactions with customers. Customer-driven excellence includes understanding what the customer wants, anticipating future needs, reducing defects and errors, meeting specifications, and reducing complaints. How the company recovers from defects and errors is also important for retaining and attracting customers.

Due to increased availability of knowledge and competition, consumers are very knowledgeable and expect excellent service. This presents a challenge for employees who interact with customers. The way in which clerks, sales staff, front-desk personnel, and service providers interact with customers influences a company's reputation and financial performance. Employees need product knowledge and service skills, and they need to be clear about the types of decisions they can make when dealing with customers. Customer service as a strategic training and development initiative is discussed in Chapter Two.

To compete in today's economy, whether on a local or global level, companies need to provide a quality product or service. If companies do not adhere to quality standards, their ability to sell their product or service to vendors, suppliers, or customers will be restricted. Some countries even have quality standards that companies must meet to conduct business there. Total Quality Management (TQM) is a companywide effort to continuously improve the ways people, machines, and systems accomplish work. 93 Core values of TQM include the following:94

- Methods and processes are designed to meet the needs of internal and external customers.
- Every employee in the company receives training in quality.
- Ouality is built into a product or service so that errors are prevented from occurring rather than being detected and corrected.
- The company promotes cooperation with vendors, suppliers, and customers to improve quality and hold down costs.
- Managers measure progress with feedback based on data.

There is no universal definition of quality. The major differences in its various definitions relate to whether the customer, product, or manufacturing process is emphasized. For example, quality expert W. Edwards Deming emphasizes how well a product or service meets customer needs. Phillip Crosby's approach emphasizes how well the service or manufacturing process meets engineering standards.

The emphasis on quality is seen in the establishment of the Malcolm Baldrige National Quality Award and the ISO 9000:2000 quality standards. The Baldrige award, created by public law, is the highest level of national recognition for quality that a U.S. company can receive. The award is given annually. To become eligible for the Baldrige, a company must complete a detailed application that consists of basic information about the firm and an in-depth presentation of how it addresses specific criteria related to quality improvement. The categories and point values for the Baldrige award are found in Table 1.5.

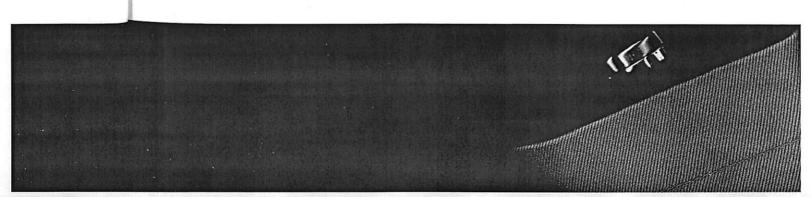


TABLE 1.5 Categories and Point Values for the Malcolm Baldrige National **Quality Award** Examination

Source: Based on "2013-2014 Criteria for Performance Excellence" from the website for the National Institute of Standards and Technology, www.nist/gov/ baldrige.

Leadership	120
The way senior executives create and sustain vision, values, and mission; promote legal and ethical behavior; create a sustainable company; and communicate with and engage the workforce	
Measurement, Analysis, and Knowledge Management	90
The way the company selects, gathers, analyzes, manages, and improves its data, information, and knowledge assets	
Strategic Planning	85
The way the company sets strategic direction, how it determines action plans, how it changes strategy and action plans if required, and how it measures progress	
Workforce Focus	
Company's efforts to develop and utilize the workforce to achieve high performance; how the company engages, manages, and develops the potential of the workforce in alignment with company goals	
Operations Focus	85
Design, management, and improvement of work systems and work processes to deliver customer value and achieve company success and sustainability	
Results	450
Company's performance and improvement in key business areas (product, service, and supply quality; productivity; and operational effectiveness and related financial indicators)	
Customer Focus	85
Company's knowledge of the customer, customer service systems, current and potential customer concerns, customer satisfaction and engagement	
Total Points	1,000

The award is not given for specific products or services. Organizations can compete for the Baldrige award in one of six categories: manufacturing, service, small business, education, health care, and nonprofit. All applicants for the Baldrige Award undergo a rigorous examination process that takes from 300 to 1,000 hours. Applications are reviewed by an independent board of about 400 examiners who come primarily from the private sector. Each applicant receives a report citing company strengths and opportunities for improvement.

The Baldrige Award winners usually excel at human resource practices, including training and development. For example, consider PricewaterhouseCoopers Public Sector Practice (PwC PSP), a 2014 award winner and MESA Products Inc., a 2012 award winner.95 PwC PSP provides risk, management, and technology consulting to state, local, and federal governments. Contractor performance assessment reports have been nearly 100 percent "exceptional" or "very good" from 2010 to 2014. PwC PSP scores on a tool used to

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assess customer engagement and loyalty has been equal to or better than scores from other U.S. consulting companies. An important reason for its customer satisfaction and loyalty is that PwC PSP makes extensive use of knowledge management to help employees learn and to serve clients. It collects knowledge through the Knowledge Gateway where it is reviewed by knowledge management team members and content experts. The knowledge is then shared through a web-based tool designed to help employees collaborate with each other. Employees use this tool to share and find knowledge, exchange ideas, and seek developmental opportunities. Senior leaders at PwC PSP identify high-performing operations and invite them to present their practices at managing partner meeting. The practices are also shared on the Knowledge Gateway. MESA Products Inc. installs protective systems that control metal erosion in underground and submerged pipes and tanks. MESA's culture supports employees in developing or changing their career path. Employees are cross trained, providing them with opportunities to change jobs. MESA's managers place a large emphasis on workforce learning and development.

The International Organization for Standardization (ISO), a network of national standards institutes that includes 160 countries and has a central governing body in Geneva, Switzerland, is the world's largest developer and publisher of international standards.⁹⁶ The ISO develops standards related to management as well as a wide variety of other areas, including education, music, ships, and even protecting children. ISO standards are voluntary, but countries may decide to adopt ISO standards in their regulations; and as a result, they may become a requirement to compete in the market. The ISO 9000 is a family of standards related to quality (ISO 9000, 9001, 9004, and 10011). The ISO 9000 quality standards address what the company does to meet regulatory requirements and the customer's quality requirements while striving to improve customer satisfaction and continuous improvement. The standards represent an international consensus on quality management practices. ISO 9000:2000 has been adopted as the quality standard in nearly 100 counties around the world, meaning that companies have to follow these standards to conduct business in those countries. The quality management standards of the ISO 9000 are based on eight quality management principles, including customer focus, leadership, people involvement, a process approach, a systems approach to management, continuous improvement, using facts to make decisions, and establishing mutually beneficial relationships with suppliers. ISO 9001:2008 is the most comprehensive standard because it provides a set of requirements for a quality management system for all organizations, both private and public. The ISO 9001:2008 has been implemented by more than 1 million organizations in 176 countries. ISO 9004 provides a guide for companies that want to improve.

Why are standards useful? Customers may want to check that the product they ordered from a supplier meets the purpose for which it is required. One of the most efficient ways to do this is when the specifications of the product have been defined in an international standard. That way, both supplier and customer are on the same wavelength, even if they are based in different countries, because they are both using the same references. Today, many products require testing for conformance with specifications, compliance with safety, or other regulations before they can be put on many markets. Even simpler products may require supporting technical documentation that includes test data. With so much trade taking place across borders, it is more practical for these activities to be carried out not by suppliers and customers, but by specialized third parties. In addition, national

legislation may require such testing to be carried out by independent bodies, particularly when the products concerned have health or environmental implications. One example of an ISO standard is on the back cover of this book and nearly every other book. On the back cover is something called an International Standard Book Number (ISBN). Publishers and booksellers are very familiar with ISBN numbers, since these numbers are the method through which books are ordered and bought. Try buying a book on the Internet, and you will soon learn the value of the ISBN number—there is a unique number for the book you want. And it is based on an ISO standard.

In addition to competing for quality awards and seeking ISO certification, many companies are using the Six Sigma process. The Six Sigma process refers to a process of measuring, analyzing, improving, and then controlling processes once they have been brought within the narrow Six Sigma quality tolerances or standards. The objective of Six Sigma is to create a total business focus on serving the customer; that is, to deliver what customers really want when they want it. For example, at General Electric (GE), introducing the Six Sigma quality initiative meant going from approximately 35,000 defects per million operations—which is average for most companies, including GE—to fewer than 4 defects per million in every element of every process GE businesses perform—from manufacturing a locomotive part to servicing a credit card account to processing a mortgage application to answering a phone. 97 Training is an important component of the process. Six Sigma involves highly trained employees known as Champions, Master Black Belts, Black Belts, and Green Belts, who lead and teach teams that are focusing on an ever-growing number of quality projects. The quality projects focus on improving efficiency and reducing errors in products and services. The Six Sigma quality initiative has produced more than \$2 billion in benefits for GE.

Training can help companies meet the quality challenge by teaching employees a concept known as "lean thinking." Lean thinking is a way to do more with less effort, equipment, space, and time, but still provide customers with what they need and want. Part of lean thinking includes training workers in new skills or teaching them how to apply old skills in new ways so they can quickly take over new responsibilities or use new skills to help fill customer orders. Baylor Health Care System wanted to decrease waste and improve patient satisfaction and outcomes through implementing lean thinking and process improvements in several of its hospitals. 98 This included training employees for how to make changes to work processes. Lean thinking and process improvement supported by training provided significant value. For example, The Corporate Supply Management team eliminated two-thirds of the time for completing contracts, developed a decision tree for different types of projects, and reduced errors saving \$10 million. A hospital readmission team redesigned the patient discharge process to reduce the chances of patients returning within thirty days. They realized a 44 percent decrease in readmissions over a six-month period, which improved the quality of life for patients and Baylor's ability to receive Medicare/Medicaid payments from the government.

A group within the ISO has drafted a standard for employee training. ISO 10015 is a quality management tool designed to ensure that training is linked to company needs and performance. ISO 10015 has two key features. 99 First, companies have to determine the return on investment of training to company performance. Second, ISO 10015 requires companies to use appropriate design and effective learning processes. ISO 10015 defines

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0015 is a needs and rmine the 5 requires 5 defines training design as analyzing, planning, doing, and evaluating (recall the discussion of the Instructional System Design model earlier in this chapter).

New Technology

Technology has reshaped the way we play, communicate, plan our lives, and work. Many companies' business models includes e-commerce, which allows consumers to purchase products and services online. The Internet is a global collection of computer networks that allows users to exchange data and information. Roughly 84 percent of U.S. households have a computer (desktop, laptop, tablet, or smart phone) and 75 percent have Internet access. A total of 60 percent of Americans visit Google during the week, and 43 percent have a Facebook page. 100 Using Facebook, Twitter, Linkedln, and other social networking tools available on the Internet accessed through smart phones, notebooks, or personal computers, company managers can connect with employees and employees can connect with friends, family, and co-workers.

Influence on Training

Advances in sophisticated technology along with reduced costs for the technology are changing the delivery of training, making training more realistic, and giving employees the opportunity to choose where and when they will work. New technologies allow training to occur at any time and any place. 101

Technological advances in electronics and communications software have made possible mobile technology such smart phones, notebook computers, and iPads, and enhanced the Internet through developing the capability for social networking. Social networking refers to websites such as Facebook, Twitter, and Linkedln, wikis, and blogs that facilitate interactions between people, usually around shared interests. Table 1.6 shows how social networks can be used for training and development. 102

In general, social networking facilitates communications, decentralized decision making, and collaboration. Social networking can be useful for busy employees to share knowledge and ideas with their peers and managers, with whom they may not have much time to interact in person on a daily basis. Employees, especially young workers from the millennial or Gen-Y generations, have learned to use social networking tools such as

Potential Uses of Social Networking for Training and Development

Issues	Uses
Loss of expert knowledge due to retirement	Knowledge sharing, capturing, and storing
Employee engagement	Collect employee opinions
Identify and promote employee expertise	Create online expert communities
Promote innovation and creativity	Encourage participation in online discussions
Reinforce learning	Share best practices, applications, learning, points, links to articles and webinars
Employees need coaching and mentoring	Interact with mentors and coaching peers

Sources: Based on P. Brotherson, "Social Networks Enhance Employee Learning," T+D (April 2011): 18-19; T. Bingham and M. Connor, The New Social Learning (Alexandria, VA: American Society for Training & Development, 2010); M. Weinstein, "Are You Linked In?" training (September/October 2010): 30-33; S. Gilbert & A. Silvers, "Learning Communities With Purpose", TD (January 2015): 48-51.

Facebook throughout their lives and see them as valuable tools for both their work and personal lives.

Despite its potential advantages, many companies are uncertain as to whether they should embrace social networking. ¹⁰³ They fear, perhaps correctly, that social networking will result in employees wasting time or offending or harassing their co-workers. But other companies believe that the benefits of using social networking for human resource practices and allowing employees to access social networks at work outweigh the risks. They trust employees to use social networking productively and are proactive in developing policies about personal use and training employees about privacy settings and social network etiquette. They realize that employees will likely check their Twitter, Facebook, or Linkedln accounts, but they ignore it unless productivity is decreasing. In some ways, social networking has become the electronic substitute for daydreaming at one's desk or walking to the break room to socialize with co-workers.

Robotics, computer-assisted design, radio-frequency identification, and nanotechnology are transforming work. 104 Technology has also made it easier to monitor environmental conditions and operate equipment. For example, consider working a grader construction vehicle (which is used to smooth and level dirt on roadways and other construction projects). Older vehicle models required operating as many as fifteen levers in addition to a steering wheel and several foot pedals. As a result, working the grader usually left operators with sore backs and shoulders at the end of the day. Caterpillar's latest version of the grader includes redesigned controls that use only two joysticks and eliminate the physical demands of pushing pedals and turning a steering wheel. Besides reducing the physical demands, the redesign of the grader without a steering wheel resulted in operators having better visibility of the steel blade, and switches for lights, windshield wipers, and the parking brake could be grouped together in one place in the cab. A Japanese commercial farm, Shinpuku Seika, relies on computer readings from monitors placed out in the fields that report temperature, soil, and moisture levels to the farmers. 105 Computer analysis of these data alerts farmers when to start planting or identifies specific crops that may grow best in each field. Farmers can use cameras in the fields to examine crops. Farm workers can also use their mobile phones to take pictures of potential diseased or infected crops that are uploaded to the computer for diagnosis by crop experts. The workers' phones also include a global positioning system, allowing the company to determine if workers are taking the most efficient routes between fields or slacking off on the job.

Technology has many advantages, including reduced travel costs, greater accessibility to training, consistent delivery, the ability to access experts and share learning with others, and the possibility of creating a learning environment with many positive features such as feedback, self-pacing, and practice exercises. While trainer-led classroom instruction remains the most popular way to deliver training, companies report that they plan on delivering a large portion of training through learning technologies such as intranets and iPods. For example, consider how training at Verizon, the telecommunications company, has changed. Some training programs at Verizon still include face-to-face instructor-led courses. But to improve both employees' accessibility to training and customer service, Verizon has deployed tablets to retail store employees. Employees can use these tablets to get access to information about devices, service plans, product promotions, processes, and procedures. They can share this information with the customer during their interactions. The tablets are also used to deliver e-learning. Learning and development at Verizon is

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evaluated based on its contribution to both employee and business performance. Verizon also uses social networking tools to train employees to support new products and devices. Device Blog, Device Forum, and Learning Communities help to ensure that employees are ready to support customers when new products and devices are introduced to the market, engages Verizon's multigenerational workforce, and facilitates peer-to-peer learning. Device Blog makes available information and updates on wireless devices (such as DROID), FAQ's (frequently asked questions), how-to-videos, and troubleshooting tips. Device Forums enable retail employees to learn from peers and product manufacturers. Employees can ask each other questions, share issues, post tips, make suggestions, and access product experts. Learning communities are accessed through the Device Blog. They include video blogs, message boards, links to online training modules, and product demonstrations. In addition to these tools, employees have access to My Network for collaborating with their peers, knowledge and document sharing, and creating working groups. Some trainers also use it for posting supplemental content for learners' use.

Technology is pushing the boundaries of artificial intelligence, speech synthesis, wireless communications, networked virtual reality and adaptive learning. 107 Realistic graphics, dialogue, and sensory cues can now be stored onto tiny, inexpensive computer chips. For example, Second Life is an online virtual world that allows members to develop fictional lives. In Second Life, members can run a business, take a date to a dance club, or visit a training center. Virtual sensations (vibrations and other sensory cues) are being incorporated into training applications. For example, in medical training, machines can replicate the feeling of pushing a needle into an artery and use sound and motion to simulate different situations such as a baby crying or a patient in pain.

Flexibility in Where and When Work Is Performed

Advances in technology, including more powerful computer chips and increased processing power of PDAs, notebooks, and iPhones have the potential for freeing workers from going to a specific location to work and from traditional work schedules. One estimate is that 9.5 percent or 13.4 million U.S. employees are working at home at least one day a week. 108 One in four home-based employees are working in management, business, and finance jobs and half are self-employed. Employees in health care and installation, maintenance, and repair occupations are the least likely to work from home. Telecommuting has been shown to increase employee productivity, encourage family-friendly work arrangements, and help reduce traffic and air pollution. 109 Employees at Salesforce.com Inc. can work from home and use Chatter, a Facebook-type application, to coordinate projects. 110 Managers can monitor whether employees working at home have answered clients' questions and finished reports.

At Delta Air Lines, more than 570 of the 5,000 agents work from home full time. 111 To strengthen their commitment and understanding of the company, each agent works in a call center for six months before working from home. While working at home, they can contact a team leader with questions. They also have monthly meetings. Delta spends \$2,500 to purchase a computer and software for each reservation agent who works at home. The costs are offset by the lower hourly wage these agents receive compared to agents who work in the office. However, working at home reduces the agents' costs for gasoline and gives them more flexibility to balance their work and personal lives. The company has realized savings in rent and upkeep of office space, and the offsite agents have helped

meet customer service demands due to bad weather by volunteering for more overtime than agents working in offices.

Technology also allows companies greater use of alternative work arrangements. Alternative work arrangements include independent contractors, on-call workers, temporary workers, and contract company workers. The Bureau of Labor Statistics estimates that alternative work arrangements make up 11 percent of total employment. 112 There are 10.3 million independent contractors, 2.5 million on-call workers, 1.2 million temporary help agency workers, and approximately 813,000 workers employed by contract firms. Use of alternative work arrangements allows companies to adjust staffing levels more easily based on economic conditions and product and service demand. And when a company downsizes by laying off workers, the damage to the morale of full-time employees is likely to be less severe. Alternative work arrangements also provide employees with flexibility for balancing work and life activities. For example, Verigy, a semiconductor manufacturer in California, employs only a small number of permanent employees, and nonessential jobs are outsourced. When demand for its products increases, engineers and other high-tech employees are hired through staffing companies or as independent contractors. 113 Also, the use of alternative work arrangements has resulted in the development of co-working sites where diverse workers such as designers, artists, freelancers, consultants, and other independent contractors pay a daily or monthly fee for a guaranteed work space. 114 The co-working site is equipped with desks and wireless Internet, and some provide access to copy machines, faxes, and conference rooms. Co-working sites help facilitate independent contractors, employees working at home, traveling, or telecommuting, combat their possible feelings of isolation, give them the ability to collaborate and interact, provide a more professional working atmosphere than coffee shops (and similar public locations where such employees often work off-site), and help to decrease traffic and pollution.

A key training issue that alternative work arrangements present is to prepare managers and employees to coordinate their efforts so that such work arrangements do not interfere with customer service or product quality. The increased use of alternative work arrangements means that managers need to understand how to motivate employees who may actually be employed by a third party such as a temporary employee service or leasing agency.

High-Performance Models of Work Systems

New technology causes changes in skill requirements and work roles and often results in redesigned work structures (e.g., using work teams). 115 For example, computer-integrated manufacturing uses robots and computers to automate the manufacturing process. The computer allows the manufacture of different products simply by reprogramming the computer. As a result, laborer, material handler, operator/assembler, and maintenance jobs may be merged into one position. Computer-integrated manufacturing requires employees to monitor equipment and troubleshoot problems with sophisticated equipment, share information with other employees, and understand the relationships among all components of the manufacturing process.116

Through technology, the information needed to improve customer service and product quality becomes more accessible to employees. This means that employees are expected to take more responsibility for satisfying the customer and determining how they perform their jobs. One of the most popular methods for increasing employee responsibility and overtime

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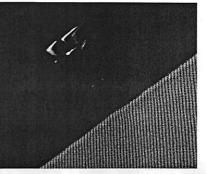
control is work teams. Work teams involve employees with various skills who interact to assemble a product or provide a service. Work teams may assume many of the activities usually reserved for managers, including selecting new team members, scheduling work, and coordinating activities with customers and other units in the company. To give teams maximum flexibility, cross training of team members occurs. Cross training refers to training employees in a wide range of skills so they can fill any of the roles needed to be performed on the team.

Consider the high-performance work system at the Chrysler Dundee Engine Plant in Dundee, Michigan.¹¹⁷ Compared to most engine plants, this plant is more automated and has fewer employees-709 compared to 600-2,000. The goal of the plant is to be the most productive engine plant in the world. The plant's hourly employees rotate jobs and shifts, giving the company greater flexibility and employees more family time. The plant's culture emphasizes problem solving and the philosophy that anyone can do anything, anytime, anywhere. Every employee is either a team member or a team leader. By rotating jobs, the plant keeps workers motivated and avoids injuries. Team leaders and engineers don't stay in their offices-they are expected to work on the shop floor as part of sixperson teams. Contractors are also seen as part of the team, working alongside assembly workers and engineers and wearing the same uniforms. The plant gives employees access to technology that helps them monitor productivity. Large electronic screens hanging from the plant ceiling provide alerts of any machinery parts that are ending their lifespan and need to be replaced before they malfunction. A performance management system, available on personal computers as well as a display board, alerts employees to delays or breakdowns in productivity. This is different than in most engine plants, where only the managers have access to this information. The technology at the plant empowers all employees to fix problems—not just managers or engineers.

Use of new technology and work designs such as work teams needs to be supported by specific human resource management practices. These practices include the following actions:118

- Employees choose or select new employees or team members.
- Employees receive formal performance feedback and are involved in the performance improvement process.
- Ongoing training is emphasized and rewarded.
- Rewards and compensation are linked to company performance.
- Equipment and work processes encourage maximum flexibility and interaction between employees.
- Employees participate in planning changes in equipment, layout, and work methods.
- Employees understand how their jobs contribute to the finished product or service.

What role does training play? Employees need job-specific knowledge and basic skills to work with the equipment created by the new technology. Because technology is often used as a means to achieve product diversification and customization, employees must have the ability to listen and communicate with customers. Interpersonal skills, such as negotiation and conflict management, and problem-solving skills are more important than physical strength, coordination, and fine-motor skills-previous job requirements for many manufacturing and service jobs. Although technological advances have made it



possible for employees to improve products and services, managers must empower employees to make changes.

Besides changing the way that products are built or services are provided within companies, technology has allowed companies to perform work using virtual teams. Virtual teams refer to teams with members that are separated by time, geographic distance, culture, and/or organizational boundaries and that rely almost exclusively on technology (such as e-mail, Internet, and video conferencing) to interact and complete their projects. Virtual teams can be formed within one company, whose facilities are scattered throughout the country or the world. A company may also use virtual teams in partnerships with suppliers or competitors to pull together the necessary talent to complete a project or speed the delivery of a product to the marketplace. The success of virtual teams requires a clear mission, good communications skills, trust between members that they will meet deadlines and complete assignments, and an understanding of cultural differences (if the teams have global members).

For example, Art & Logic software developers all work remotely from across the United States and Canada from home offices, rented office space or at a co-working facility. 119 Their clients represent a diverse set of industries, including education, aerospace, music technology, consumer electronics, entertainment, and financial services. The project teams work on the most unusual and difficult problems that developers at other companies have failed to solve. Art & Logic tries to accommodate the unique schedule and work-style requirements of its developers, but its work is highly collaborative within project teams. Every project consists of at least a project manager/developer and has a maximum of five to seven developers. Teams use Google Apps for Business for sharing documents and communicating (both within the team and with clients).

SNAPSHOT OF TRAINING PRACTICES

Training can play a key role in helping companies gain a competitive advantage and successfully deal with competitive challenges. Before you can learn how training can be used to help companies meet their business objectives, and before you can understand training design, training methods, and other topics covered in the text, you need to become familiar with the amount and type of training that occurs in the United States. Also, you must understand what trainers do. The next sections of this chapter present data regarding training practices (e.g., how much companies spend on training, what type of training is occurring, and who is being trained), as well as the skills and competencies needed to be a trainer.

Training Facts and Figures

The snapshot of training practices provided in this section is based on data and collected from a number of sources, including surveys conducted by Training magazine and the ATD. (Association for Talent Development, previously known as the American Society for Training and Development). 120 For several reasons, these data should be viewed as reasonable estimates of practices rather than precise facts. One is that the samples may not be representative of all size or types of companies. For example, the Training survey was conducted by a research firm that e-mailed invitations to subscribers to participate in an online survey. The response rate ranged from 31 percent for large firms to 28 percent ower em-

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TABLE 1.7 Questions and Answers about Training **Practices**

Source: L. Miller, "2014 State of the Industry" (Alexandria, VA: Association for Talent Development, 2013); "2014 Industry Report," training (November/December 2014):16-29.

Investment and Distribution of Expenditures

- Q: How much do U.S. organizations spend on employee learning and development?
- A: Approximately \$161.8 billion
- Q: How much is spent per employee?
- A: \$1,208
- Q: What is the percentage of dollars spent on training and development as a percentage of payroll?
- A: 3.4 percent
- Q: How much is spent as a percentage of profit?
- A: 7.5 percent
- Q: How much time do employees spend in formal training each year?
- A: 31.5 hours
- Q: Who receives most of the training?
- A: 40 percent of training budgets and dollars are spent on nonexempt employees, 26 percent on exempt employees, 24 percent on managers, and 10 percent on executives

Efficiency

- Q: What percent of total expenses go to tuition reimbursement?
- A: 10 percent
- Q: How many training staff members are there for each employee?
- A: 16 staff members for every 1,000 employees
- Q: What is the average cost for providing one learning hour to one employee?
- Q: What is the average cost of producing one hour of formal training?
- A: \$1,798
- Q: What is the ratio of learning hours used to learning hours available?
- A: 46 to 1

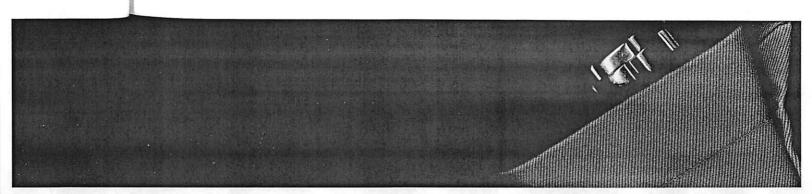
Delivery Methods

- Q: How is training delivered?
- A: 47 percent by a instructor in a classroom, 29 percent via blended learning (including both face-to-face and technology delivery), 29 percent online, 1 percent mobile devices, 4 percent social learning
- Q: What percentage of direct learning expenditures are allocated to outside providers (i.e., outsourced)?
- A: 28 percent

for small firms. The ATD annual State of the Industry Report includes hundreds of organizations across all major industries grouped into three categories: companies who have received awards for training, ATD BEST Award winners, Fortune Global 500 companies, and consolidated responses.

You may be asking yourself questions such as, "How much time and money do companies spend on training?" or "Is instructor-delivered training obsolete?" Table 1.7 provides a snapshot of trends in workplace learning. U.S. organizations continue to invest large amounts of money in learning initiatives. Here is an overview of some key trends in these investments:

Direct expenditures, as a percentage of payroll and learning hours, have remained stable over the last several years.



- There is an increased demand for specialized learning that includes manager, professional, and industry-specific content.
- The use of technology-based learning delivery has increased from 33 percent in 2010 to 39 percent in 2012.
- Self-paced online learning is the most frequently used type of technology-based learning.
- Technology-based learning has helped improve learning efficiency, as shown by decrease in the reuse ration since 2010. (The "reuse ratio" is defined as how much learning content is used or received for every hour of content.) The reuse ratio dropped by 6 percent to 48 hours in 2013. This means that every hour of learning content available was received by about 46 employees. This decrease means that each hour of content was delivered fewer times. A low reuse ratio means new content is being created but not distributed.
- Technology-based learning has resulted in a larger employee-learning staff member
- The percentage of services distributed by external providers (e.g., consultants, workshops, and training programs) has remained about the same since 2010.
- A high ratio indicates programs being used by more employees, but there are fewer new courses.
- Traditional, instructor-led classroom training continues to be the most popular method.

Of the \$61.8 billion spent on training, 63 percent is for internal costs such as trainingstaff salaries and course development, and 27 percent is for services by external providers (such as consultants, workshops, or training programs outside the company) and 10 percent on tuition reimbursement. After several years of increases in cost per learning hour it fell in 2013, suggesting that companies are more effectively distributing training to employees.

Figure 1.4 shows the different types of training provided by companies. Profession or industry-specific content, managerial and supervisory, and mandatory and compliance account for 34 percent of learning content. The least amount of learning content concerns basic and other skills.

Training Investment Leaders

The chapter's opening vignette illustrates how training can be used by companies to gain a competitive advantage. Higher investment in training by companies in the United States is related to use of innovative training practices and high-performance work practices such as teams, employee stock ownership plans, incentive compensation systems (profit sharing), individual development plans, and employee involvement in business decisions. This spending (along with the use of high-performance work practices) has been shown to be related to improved profitability, customer and employee satisfaction, and the ability to retain employees. For example, companies including Grant Thornton LLP, Wipro Technologies, Steelcase, and InterContinental Hotels Group have recognized that training contributes to their competitiveness. They make a substantial financial investment in training and use it to drive productivity, customer service, and other results important to business. Chapter Two discusses how training can help companies meet their business goals.

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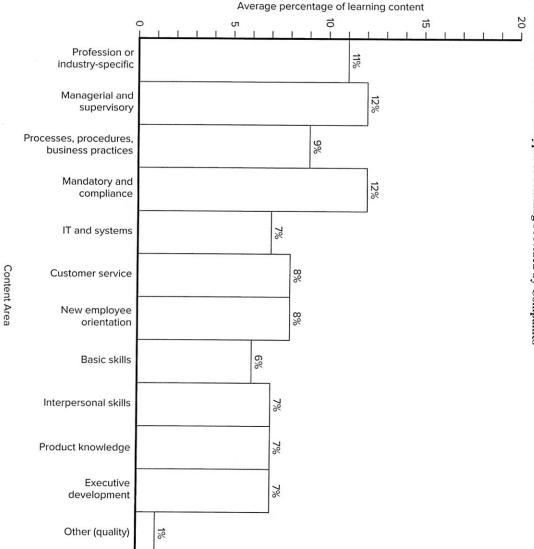
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FIGURE 1.4 Different Types of Training Provided by Companies



Note: Data from consolidate d responses (companies that submitted their annual data as part of ASTD's benchmarking programs). Source: Based on L. Miller, "2014 State of the Industry" (Alexandria, VA: Association for Talent Development, 2014).

average of 16,719 employees. Table 1.8 shows the characteristics of BEST Award-winning practices (e.g., number of hours spent on training); these included 340 companies with an program companies provided ATD with a standard set of information on their training Benchmarking program with companies that received ATD BEST Awards (recognizing companies that show a clear link between learning and performance). ¹²¹ Benchmarking try Report, 2013 compares the training practices of companies that were part of the ATD in gaining a competitive advantage differ from other companies? ATD's State of the Indus-How do the training practices of companies that have recognized training's importance

TABLE 1.8 Characteristics of BEST Award Winners

Source: L. Miller, "2014 State of the Industry" (Alexandria, VA: Association for Talent Development, 2014)

Alignment of business strategy with training and development

Learning is valued as part of the culture and supported by executive leaders and top

Effectiveness and efficiency of learning is measured

Investment in training and development

Different learning opportunities are provided and all employees have access to them Measurement of effectiveness and efficiency of training and development activities Non-training solutions for performance improvement used, including organization

development and process improvement

TABLE 1.9 Comparison of BEST Award Winners and Benchmark Companies

	Benchmark Company	BEST Award Winner
Amount of training received per employee	32 hours	36 hours
Average cost per learning hour available	\$1,798	\$1,459
Amount spent on training per employee	\$1,208	\$1,296
Ratio of learning hours used to learning hours available (reuse ratio)	46.0	78.3

Source: L. Miller, "2014 State of the Industry" (Alexandria, VA: Association for Talent Development, 2014).

companies. As will be discussed in Chapter Two, the BEST Award winners are engaging in strategic training and development—training and development that supports the business's strategies and has measurable outcomes. The BEST Award winners included thirty-three companies with an average of 51,809 employees. Table 1.9 compares the BEST Award winners with the Benchmark companies. As the table shows, companies that were BEST Award winners were able to more efficiently deliver training (less cost, higher reuse ratio) than Benchmark firms. Also, at BEST Award-winning companies employees on average engaged in more learning hours than employees at Benchmark companies.

Roles, Competencies, and Positions of Training Professionals

Trainers can typically hold many jobs, such as instructional designer, technical trainer, or needs analyst. Each job has specific roles or functions. Table 1.10 provides examples of the roles that training and development professionals might take in their jobs. These roles are included in jobs such as organizational change agent, career counselor, instructional designer, and classroom trainer. Training department managers devote considerable time to the roles of business partner and learning strategist. Training department managers may be involved in the project management role, but, because of their other responsibilities, they are involved to a lesser extent than are specialists who hold other jobs. Human resource managers may also be required to complete many of the training roles, although their primary responsibility is in overseeing the human resources functions of the division, department, or company (e.g., staffing, recruiting, compensation, benefits). Special knowledge, skills, or behaviors—also called competencies—are needed to perform each role successfully.

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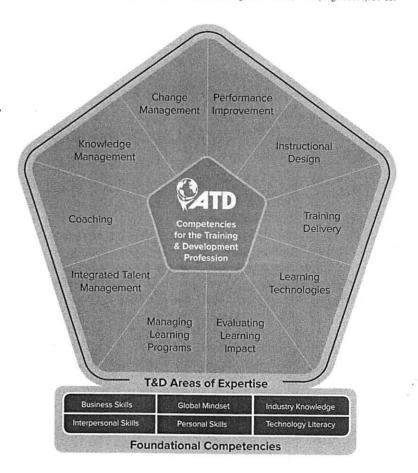
TABLE 1.10 Training and Development Roles

Learning Strategist	Determines how workplace learning can be best used to help meet the company's business strategy
Business Partner	Uses business and industry knowledge to create training that improves performance
Project Manager	Plans, obtains, and monitors the delivery of learning and performance solutions to support the business
Professional Specialist	Designs, develops, delivers, and evaluates learning and performance solutions.

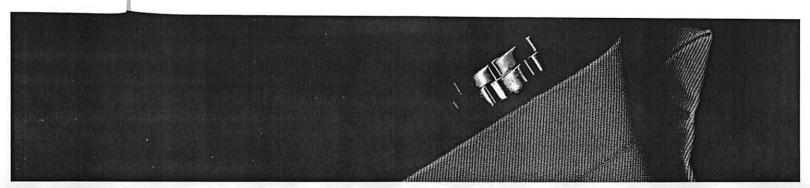
Source: Based on M. Allen and J. Naughton, "Social Learning: A Call to Action for Learning Professionals," T+D (August 2011): 50-55.

FIGURE 1.5 The ATD Competency Model

Source: From J. Arneson, W. Rothwell, and J. Naughton, "Training and Development Competencies, Redefined to Create Competitive Advantage," T+D (January 2013): 42-47.



The most comprehensive study of training professionals has been conducted by the ATD. 122 Figure 1.5 shows the ATD competency model. The model describes what it takes for an individual to be successful in the training and development field. It includes specific areas of expertise and foundational competencies. The areas of expertise include knowledge and behaviors required by different roles (e.g., change management, learning



technologies, training delivery). Although training professionals spend most of their time designing learning (instructional design), delivering training, managing learning programs, identifying, selecting, and using learning technologies, and coaching (working oneon-one with employees to help them develop), they do spend time in other areas as well. The model recognizes that performance improvement (designing and developing solutions to close performance gaps), talent management (including talent acquisition, development, and retention), and knowledge management are other important areas of expertise.

The foundational competencies anchor the competency model. The foundational competencies include interpersonal skills, business skills, personal skills, global mindset, industry knowledge, and technology literacy. The foundational competencies are important regardless of a trainer's area of expertise or role but are used to a different extent in each role or specialization.

Traditional narrow jobs in the training department focusing on one type of expertise (e.g., instructional designer and technical writer) are changing; having multiple areas of expertise becomes more necessary for training and development to contribute to the business. Project management requires the knowledge of new training technologies (e.g., webdelivered learning, mobile learning, and knowledge management systems) and the ability to manage managers, engineers, scientists, and others who may have more experience, knowledge, or technical savvy than the trainer.

To provide you with an idea of the variety of responsibilities and expertise required for training professional jobs, Table 1.11 provides an example of an instructional system designer job that was posted on the ATD website.

Table 1.12 shows median salaries for training professionals. Keep in mind that very rarely does anyone hold the highest-paying jobs (training manager, executive-level manager) without having developed competencies in a number of training roles.

Who Provides Training?

In most companies, training and development activities are provided by trainers, managers, in-house consultants, and employee experts. However, as the snapshot of training practices suggests, training and development activities are also outsourced. **Outsourcing** means that training and development activities are provided by individuals outside the company. Training providers outside the company include colleges and universities, community and junior colleges, technical and vocational institutions, product suppliers, consultants and consulting firms, unions, trade and professional organizations, and government organizations. Outsourcing is discussed in greater detail in Chapter Two.

Who Is in Charge of Training?

Training and development can be the responsibility of professionals in human resources, human resource development, or organizational development. 123 Companies may also have entire functions or departments called human resources, human resource development, talent management or development, or organizational development that provide training and development.

In small companies, training is the responsibility of the founder and all the employees. When organizations grow to 100 employees, typically someone within the company is in charge of human resources, either as part of that person's job or as his or her sole responsibility. At this point, training becomes one of the responsibilities of the employee in charge of their time earning proorking oneeas as well. ng solutions on, developf expertise. itional commindset, ine important tent in each

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TABLE 1.11 Example of Jobs Posted on the ATD

Website

Instructional Systems Designer/Developer/Trainer

Role Overview: The job incumbent serves as a consultant and provides hands-on expertise in the areas of adult education methodologies, leadership development, leadership/ management training, course design, e-learning, and organizational development. The incumbent of this position is responsible for the performance of duties involved in carrying out the functional responsibilities.

Responsibilities

- Design, develop, and deliver instructor-led, e-learning, or blended training programs, courses, seminars, workshops, and presentations on leadership and management.
- Provide training expertise related to topics such as leadership development, management skills, supervisory training, performance and productivity, conflict management, team building, project teams, business communications, career planning, diversity and inclusion, and interpersonal effectiveness.
- · Conduct stand-up training, facilitate learning activities, employ adult learning principles, deliver sessions, provide resources, and advise students.
- Research, design, and evaluate programs, courses, and activities, including selection of media products and animation.
- Design new courses and update existing course designs and training programs.
- Contribute actively to a standard of excellence in carrying out our mission of promoting learning and self-development.
- · Serve as facilitator and consultant.
- Lead talent to the highest level of performance and productivity through the creation and use of innovative best practice training and professional development systems, policies, processes, and procedures.

Desired Qualifications

- Master's degree in Instructional Technology, Education, Organization Development, Human Resource Development, Adult Learning, or other related areas.
- Knowledge of and experience in applying Adult Learning Principles.
- Certification and experience in applying one or more assessments (e.g., 5 Dynamics, Myers Briggs, DiSC, StrengthsFinder, Thomas-Kilmann) are highly desired.
- Membership and/or certification in professional organizations are highly desired (e.g., ATD, SHRM, NBCC)

Skills

- Proficient using Adobe tools—eLearning Suite and Master Collection, Camtasia, Adobe Catalyst, Captivate, Photoshop, Illustrator, Macromedia Flash, Premier Pro, and Open
- Develop e-learning programs that are SCORM/AICC/Section 508 compliant.
- Experience developing Microsoft SharePoint sites and administration.
- Proficient working with most LMSs and LCMSs.
- Advanced working knowledge using Microsoft Word and PowerPoint, Publisher, Excel, and Outlook.

Experience

- Five plus years of related experience. Diverse work experiences including small and large employer work environments are essential.
- Experience in designing courses, modules, and workshops that incorporate adult education principles and experiential learning techniques; delivering training on supervision and performance management; delivering multiday training programs on leadership

and management topics; writing course designs, course materials, student resource materials, educational aids, and similar educational materials; facilitating discussions, meetings, and training group activities; actively collaborating and contributing to effective teamwork as part of a training team.

Desired Personal Characteristics

- Must be able to function in a multitask environment, as part of a team and individually.
- Must have integrity and high level of interpersonal skills to handle sensitive and confidential issues involving all internal and external customers.
- · Work requires continual attention to detail in creating and proofing materials, establishing priorities and meeting deadlines.

Source: From ATD Job Bank http://jobs.td.org/jobs/, accessed March 3, 2015.

TABLE 1.12 Average Salaries for Training **Professionals**

Source: Based on "Going Up!" training (November/December 2014): 34-41.

Executive-Level Training/Human Resource Development Manager	\$112,245
Executive-Level Manager	129,053
Training Department Manager (1–5 trainers report to you)	88,658
Training Department Manager (more than 5 trainers report to you)	91,287
One-Person Training Department	68,858
Classroom Instructor/Trainer	68,482
Instructional Designer	71,901
CBT/Web/Multimedia Programmer Designer/Manager	75,432
Management/Career/Organization Development Specialist	81,137
Human Resource Manager/Specialist	75,048

of human resources. In mid-sized to large organizations, training can be the responsibility of human resource professionals, or it can come from a separate function known as human resource development, talent management, development, learning, or organizational development.

Human resource development refers to the integrated use of training and development, organizational development, and career development to improve individual, group, and organizational effectiveness. Human resource development professionals might be involved in job and task analysis, instructional systems design, on-the-job training, and individual performance improvement. Organizational development professionals might focus on training as well as team building, conflict avoidance, employee development, and change management. Talent management professionals might focus on identifying the top talent in the company and ensuring that they get the training and development needed to promote them or prepare them for new positions. Learning professionals might focus on formal training and development activities as well as ensuring that informal learning and knowledge sharing occurs through use of social networking tools. As you can see from these descriptions, training and development activities can be the responsibility of human resource management, human resource development, and organizational development professionals or departments. Keep in mind that regardless of what individual, department, or function is responsible, for training and development to succeed, employees, managers, training professionals, and top managers all have to take ownership ource ssions. to effec-

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id developlual, group, ls might be aining, and onals might velopment, identifying evelopment onals might at informal ols. As you ie responsiganizational what indito succeed, e ownership for them. Throughout this book, the point is made that although training may be a formal responsibility of someone's job, employees at all levels of the company play a role in the success of training. Also, regardless of which function or department is responsible for training and development, it must be aligned with the business strategy and must support business needs. Professionals who are responsible for training and development may have specialized areas of expertise, such as change management for organizational development specialists, but they may also have training and development responsibilities. As shown in Figure 1.5, to perform workplace learning and performance roles successfully, professionals must understand the business and must master the competencies and areas of expertise.

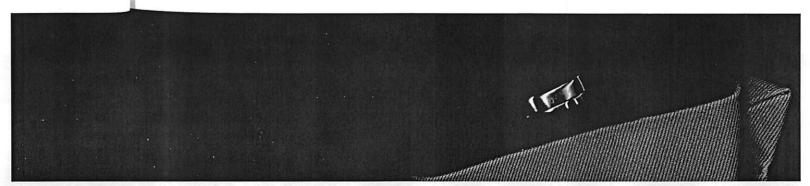
As companies grow and/or recognize the important role of training for business success, they form an entire training or learning function (how training functions can be organized is discussed in Chapter Two). The training function may include instructional designers, instructors, technical training, and experts in instructional technology.

The reporting relationship between human resource management and the training function varies across companies. 124 Some organizations include training as part of the human resource function, believing that this provides strategic partnerships with other business functions and consistent companywide training. For example, at Life Care Centers of America, a Tennessee-based company that operates elder care facilities, training is included in the human resource department because the company believes that training is part of human resource expertise, including the ability to write training curriculum and evaluate learning. Being centrally located in the human resource department makes the best use of resources and helps communicate a common management culture.

Other companies separate training from the human resource function because it allows the training function to be decentralized to better respond to unique needs in different business units. The training and development department at A. G. Edwards has a learning center and develops training programs for its financial consultants and employees. 125 Representatives of the training department regularly meet with the company's management committee at corporate headquarters, as well as with regional officers and branch managers to help them understand how training can support business objectives. A new branch manager certification program succeeded because the branch managers were involved in identifying skill gaps and their suggestions were used in the program design. The branch managers took ownership of the program and helped develop the program proposal that they then presented to corporate managers to receive funding and approval for the program. Regardless of the organizational approach used for the training function, it must help meet the training needs of the business.

Preparing to Work in Training

Everyone is a trainer at some point in his or her life. Consider the last time you had to teach some skill to a peer, sibling, spouse, friend, or even your boss. Although some people learn to train by trial and error, the best way is to take courses in training and development, or even choose an academic major related to training. For example, training and development courses are usually found in education, business and management, and psychology departments at colleges and universities. Business schools may offer undergraduate and graduate degrees in human resource management with courses in



training and development, talent management, and organizational development. Education departments may have undergraduate and graduate degrees in human resource development and learning. Courses offered with such degrees include instructional design, curriculum development, adult learning, evaluation, and on-the-job training. Psychology departments offer courses in training and development as well. These courses can be part of a degree program in industrial and organizational psychology. If you are fortunate enough to be at a large university, you may have the opportunity to take courses from education, business/management, and the psychology departments that relate to training and development. Also, you should consider the competencies you want to focus on and think about how you will master them (courses, work experience, ATD certification).

To be a successful training professional requires staying up-to-date on current research and training practices. The primary professional organizations for persons interested in training and development include ATD, the Academy of Human Resource Development (AHRD), the SHRM, the Society for Industrial and Organizational Psychology (SIOP), the Academy of Management (AOM), and the International Society for Performance Improvement (ISPI). The web addresses for these organizations are listed inside the front cover of this book. Articles about training practices can be found in the following journals: Training, T+D, Training and Development, Chief Learning Officer, Workforce Management, HR Magazine, Academy of Management Executive, and Academy of Management Learning and Education. Training and development research can be found in the following journals: Human Resource Development Quarterly, Human Resource Development Review, Performance Improvement, Personnel Psychology, Journal of Applied Psychology, Academy of Management Journal, and Human Resource Management.

Key Terms

competitiveness, 6 competitive advantage, 6 human resource management, 6 stakeholders, 7 learning, 7 training, 8 human capital, 8 development, 8 formal training and development, 8 informal learning, 8 explicit knowledge, 9 knowledge management, 9 tacit knowledge, 9

training design process, 10 Instructional System Design (ISD), 11 offshoring, 17 intellectual capital, 18 social capital, 18 customer capital, 18 knowledge workers, 19 employee engagement, 20 change, 21 learning organization, 21 talent management, 26 **STEM, 29**

Total Quality Management (TQM), 31 Malcolm Baldrige National Quality Award, 31 ISO 9000:2000, 31 Six Sigma process, 34 lean thinking, 34 ISO 10015, 34 alternative work arrangements, 38 work teams, 39 cross training, 39 virtual teams, 40 outsourcing, 46 human resource development, 48

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Discussion Questions

- 1. Describe the forces affecting the workplace and learning. How can training help companies deal with these forces?
- 2. Discuss the relationship between formal training and development, informal learning, and knowledge management. How are they related to learning and creating a learning organization?
- 3. What steps are included in the training design model? What step do you think is most important? Why?
- 4. What are intangible assets? How do they relate to training and development?
- 5. How are companies using training and development to benefit them in today's economy?
- 6. Training professionals continue to debate whether the ISD model is flawed. Some argue that ISD should be treated as a project management approach rather than a step-by-step recipe for building training programs. Others suggest that ISD is too linear and rigid a process—that it is the primary reason training is expensive, and that it takes too long to develop. ISD focuses on inputs; management wants outputs. Businesses want results, not the use of a design technology. Do you believe that ISD is a useful process? Why or why not? Are there certain situations when it is a more (or less) effective way to design training?
- 7. Which of the training professionals' roles do you believe is most difficult to learn? Which is easiest?
- 8. How might technology influence the importance of training professionals' roles? Can technology reduce the importance of any of the roles? Can it result in additional roles?
- 9. Describe the training courses that you have taken. How have they helped you? Provide recommendations for improving the courses.
- 10. How does training differ between companies that are considered BEST Award winners and those that are not?
- 11. What are the implications of generational differences in the workforce? What strategies should companies consider from a training and development perspective to cope with generational differences and use them to benefit the company?
- 12. How has new technology improved training and development? What are some of the limitations of using smart phones or notebooks for training?
- 13. Explain how training relates to attracting new employees, employee retention, and motivation.
- 14. What is the relationship between talent management and employee engagement? What role can training and development practices play in keeping employee engagement high? Explain.
- 15. How can training, informal learning, and knowledge management benefit from the use of social collaboration tools like Twitter and Facebook? Identify the social collaboration tool and explain the potential benefits gained by using it.



Application Assignments

- 1. Go to the Association for Talent Development (ATD) home page on the World Wide Web. The address is www.td.org. Review the jobs found under "Featured Jobs." Choose a job that interests you and explain why. Based on the ATD competency model presented in the chapter, discuss the roles, areas of expertise, and competencies needed in this job.
- 2. Go to www.nist.gov/baldrige/ the website for the National Institute of Standards and Technology (NIST). NIST oversees the Malcolm Baldrige Quality Award. Click on "Learn the Value." Watch the "Getting Results" video. How do companies benefit from winning the Baldrige Quality Reward? What value could a company get from competing for the award even if they don't win it?
- 3. NewBarista has created a barista skills training program. Go to www.newbarista.com. Click on "About Us" to learn about NewBarista. Next click on "Features," and watch the video "Online Barista Training." What technologies does this program use for training delivery and instruction? How do they contribute to helping baristas learn the skills needed to make a great cup of coffee?
- 4. Conduct a phone or personal interview with a manager or training manager. Ask this person to describe the role that training plays in his or her company; changes, if any, they have seen in training in the past five years; and how they believe it will change in the future.
- 5. In January 2015, Training identified the Top 125 companies for training. The top 10 ranked companies were:
 - 1. Keller Williams Realty Inc.
 - 2. Jiffy Lube International
 - 3. Capital BlueCross
 - 4. CHG Health Services
 - 5. Blue Cross Blue Shield of Michigan
 - 6. ABF Freight Systems
 - 7. McCarthy Building Companies Inc.
 - 8. Wequassett Resort and Golf Club
 - 9. Capital One
 - 10. Nationwide Mutual Insurance Company

Choose one of these companies to research. Visit the company's website, use a web search engine, or look for references to the company in publications such as training, T + D, Workforce, or HR Magazine. Prepare a report (not to exceed three pages) based on your research (a) describing why you believe the company was ranked in the top 10, and (b) explaining the relationship between training and the company's competitiveness, business goals, and objectives. Your instructor will advise you on whether the report should be submitted electronically or on hard copy. (Hint: Possible reasons a company might be ranked include the amount of money it devotes to training, the level of employee involvement in training, and the type of training used.)

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Zappos: Facing Competitive Challenges

Zappos, based in Las Vegas, is an online retailer. Its initial goal has been to be the best website for buying shoes, offering a wide variety of brands, styles, colors, sizes, and widths. The zappos.com brand has grown to offer shoes, handbags, eyewear, watches, and accessories for online purchase. Zappos's vision is that in the future, online sales will account for 30 percent of all retail sales in the United States, and Zappos will be the company with the best service and selection. As a result, Zappos believes that it can become the online service leader, drawing customers and expanding into selling other products. Zappos believes that the speed at which a customer receives an online purchase plays a critical role in how that customer thinks about shopping online again in the future, so it focuses on making sure that items get delivered to customers as quickly as possible.

In 2009, Zappos was acquired by the Amazon.com, Inc. family of companies, which share a strong passion for customer service. In 2010, Zappos had experienced tremendous growth, resulting in the need to restructure the company. Zappos was restructured into ten separate companies under the Zappos family umbrella, including Zappos.com, Inc. (the management company) and companies devoted to retail, gift cards, merchandising, and order fulfillment. Zappos has received many awards for its workplace culture and practices, including being recognized by Fortune magazine in 2013 as the #31 Best Company to Work For.

Zappos CEO Tony Heish has shaped the company's culture, brand, and business strategy around 10 core values:

- 1. Deliver WOW Through Service
- 2. Embrace and Drive Change
- 3. Create Fun and a Little Weirdness
- 4. Be Adventurous, Creative, and Open-Minded
- 5. Pursue Growth and Learning
- 6. Build Open and Honest Relationships with Communication

- 7. Build a Positive Team and Family Spirit
- 8. Do More with Less
- 9. Be Passionate and Determined
- 10. Be Humble

Deliver WOW Through Service means that call center employees need to provide excellent customer service. Call center employees encourage callers to order more than one size or color because shipping and return shipping are free. They are also encouraged to use their imaginations to meet customer needs.

Zappos's employment practices help to perpetuate its company culture. For example, the HR team uses unusual interview questions, such as "How weird are you?" and "What's your theme song?" to find employees who are creative and have strong individuality. Zappos provides free breakfast, lunch (cold cuts) and snacks, and a full-time life coach (employees have to sit on a red velvet throne to complain). Managers are encouraged to spend time with employees outside the office, and any employee can reward another employee a \$50 bonus for good performance. Most employees at Zappos are hourly. All new hires complete four weeks of training, including two weeks working the phones. New recruits are offered \$2,000 to leave the company during training—an unusual practice designed to weed out individuals who will not be happy working at the

To reinforce the importance of the ten core values, Zappos performance management system asks managers to evaluate how well employee behavior demonstrates the core values, such as acting humble or expressing their personality. To evaluate task performance, managers are asked to provide employees with regular status reports on such things as how much time they spend on the telephone with customers. The status reports and evaluations of the core values are informational or used to identify training



needs. Zappos believes in helping others understand what inspired the company culture. The company created the Zappos.com library, which provides a collection of books about creating a passion for customer service, products, and local communities. These books can be found in the front lobby of Zappos offices and are widely read and discussed by company employees.

Zappos also believes that its culture is enhanced through use of social media, including blogs and Twitter, that links employees with one another and with the company's customers. Also, Zappos takes the pulse of the organization monthly, measuring the health of the culture with a happiness survey. Employees respond to such unlikely questions as whether they believe that the company has a higher purpose than profits, whether their own role has meaning, whether they feel in control of their career path, whether they consider their co-workers to be like family and friends, and whether they are happy in their jobs. Results from the survey are broken down by department, and opportunities for development are identified and acted upon. For example, when it was clear from the survey that one department had veered off course and felt isolated from the rest of the organization, a program was instituted that enabled individuals in the group to learn more about how integral their work was. To keep the company

vibrant, CEO Tony Hsieh is spending \$350 million to develop a neighborhood in downtown Las Vegas, which will be the home of Zappos. Com new headquarters. Hseih wants to provide employees with a great place to work as well as to live and socialize.

Visit the Zappos website at www.zappos.com. Go to the bottom of the page under "About" and click on "about." Review the videos, the media kit, and the information provided about customer service, the family story, the culture, and the values. Review the Tweets especially those focusing on training, learning, and development.

What challenges is Zappos facing that may derail its attempt to be the best online retailer? How can training and development help Zappos meet these challenges? Do you think that employees at Zappos have high levels of engagement? Why? Which of Zappos's ten core values do you believe training and development can influence the most? The least? Why?

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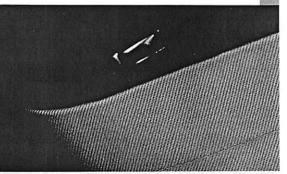
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