n many ways, solving a skill gap is like solving a puzzle—not only do you have to make the pieces fit, you have to make sure you have all the necessary pieces from the get-go. That includes a list of the required skills and competencies for each job role, assessment of what you have versus what you need, identification of high performers and best practices, necessary training, and measurement of results.

Over the last five issues of Training magazine, we’ve explored various aspects of the technical, leadership, and soft skills gaps organizations are facing around the world and have seen how employee motivation techniques, technology, and partnerships with colleges and universities can help bridge those gaps. In this last part of the series, we identify best practices and strategies organizations have used successfully to close some of their skill gaps and provide case studies from a few of our Training Top 10 Hall of Famers and 2013 Training Top 125 winners, among others. Additional best practices/solutions can be found in “RETAIN to Reskill” on p. 60 and “How to Narrow Critical Skilled Labor Gaps” on p. 62.

CASE STUDY: KPMG Thinks Forward
With the continued emergence of new technologies and new business needs, KPMG recognizes that the skills required to succeed tomorrow are not the same as the skills required to succeed today. Where once it sought to establish skill benchmarks based on the success of the past, it now seeks to anticipate the benchmarks of the future, and plan development proactively.

KPMG has established a general skills framework to promote balanced development, and ensure that at every stage of a career, a professional is building a blend of technical, business, and leadership skills. But which specific skills within that framework are most critical? The firm regularly re-assesses skill needs, and every year focuses these efforts on areas where it anticipates changes to be especially imminent.

More broadly, KPMG has shifted its paradigm of “gap” assessment. Instead of looking for instances where professionals are missing skills they need for their current role, KPMG looks for opportunities to develop skills they will need for their next role.

For example, skills once taught in a new manager training course now are taught to professionals while they are still on the “road to manager.”

Finally, KPMG recognizes the premium on individual learning planning. For KPMG professionals, skill needs vary from practice to practice, client to client, office to office. Accordingly, instead of seeking to apply a single set of benchmarks to everyone at a particular level, the firm focuses on enhancing development discussions between individual professionals and their performance managers. KPMG’s planning tools help assess multiple skills, but give the performance manager latitude to set development priorities.

In the end, KPMG is reframing its discussions of skill gaps. Because it has moved away from a one-size-fits-all comparison to the past, and toward a more individualized anticipation of the future, it is no longer talking about “deficiencies.” Instead, it’s talking about “opportunities.”
CASE STUDY: It's Personal at Deloitte Consulting, LLP

How do you provide 25,000 people with an easy, interactive, and customized learning and development experience? For Deloitte Consulting, LLP, the choice was clear—make it personal to each individual utilizing the latest technology, leading-edge innovation, and proven networking and curriculum plans.

Over the last few years, Deloitte has grown significantly. As the number of practitioners continued to grow, there was a need to take learning a step further and equip professionals with the skills, techniques, and tools required to consistently provide cutting-edge, high-quality results. Deloitte began to transform its vast curriculum and approach to delivery by emphasizing development in the areas of client service, career progression, and coaching, resulting in a learning resource called My Development Plan.

My Development Plan, a one-stop shop for managing professional development, launched across Deloitte Consulting in June 2013 to provide professionals with a personalized list of formal learning, on-the-job experiences, and networking plans to foster career advancement. The recommendations provided to professionals are appropriate for where they are in their career and consider a holistic view by identifying both formal and informal development opportunities. This resource focuses on four key components:

• **Expectations:** Recommendations for a career level that sets the standard for creating a development plan.
• **Education:** The formal learning that supports current skill sets and accelerates future development.
• **Experiences:** On-the-job opportunities that professionals should gain during their tenure at a current level.
• **Exposure:** A recommended list of career relationships that foster career development.

BEST PRACTICES

*From Lou Tedrick, VP, Wireless Workforce Development, Verizon:*

1. Work closely with functional leaders and their HR business partner to understand why the skill gap exists. 
   Examples:
   • Is it a new skill incumbents don’t have? If so, is it a skill we need to “build” with incumbents and new hires OR “buy” with new hires going forward?
   • Is it a skill they once demonstrated effectively? If so, when did the change occur and what may have contributed to the change? You need to determine if it is a “will” or a “skill” issue, if there are both skill and environmental issues at play, etc.
2. Identify “ideal performers” who demonstrate the desired skill. Observe them, talk to them, and build your learning solution(s) around the key differentiators that separate the “ideal performers” from the rest of the group.
3. Benchmark with external organizations to find out if they have faced a similar gap and, if so, what they’ve done successfully/unsuccesfully to address their gap.
4. Once you have a learning solution in mind, recommend a pilot so you can evaluate the effectiveness, adjust as necessary, and, ideally, gain a group of advocates (participants and their leaders) who will promote the value of your learning solution with their peers.
CASE STUDY:
Up-Skilling at Farmers Insurance
Farmers Insurance uses several lenses to view and address employee competencies, according to Art Dobrucki, CPCU, director of Learning Strategy & Performance, University of Farmers. Regardless of one’s position in the company, there are certain core skills at which every employee should be proficient, including conflict management, customer service, and problem-solving. “In technically focused areas such as our call centers, we have ongoing needs to continually up-skill our people on systems, products, and processes,” Dobrucki says. “As people move up in the organization, leadership development is critical to sustain bench strength as we focus on two overarching objectives: helping future leaders understand our business and building an enterprise mindset.”

To fulfill the mission to provide Farmers people with the skills needed to succeed, the company has focused on delivering the following tools and resources:

- **Competency portal:** Helps employees improve skills in more than 50 key competencies via online books and courses, experiential activities, and targeted objectives. Self-assessments determine proficiency levels. Guided development moves people from basic to advanced levels in their focus areas. “This is our most popular offering on our learning portal,” Dobrucki says.

- **Technical development:** Technical blended curricula are in place by business unit, such as Farmers’ call centers. These programs support onboarding, career path learning, and skill gap closures. “We identify gap training opportunities through evaluation of customer interactions, feedback from employees, and leadership,” Dobrucki says, noting that a recently revamped program improved quality scores by 2.4 percentage points in Farmers’ billing center.

**Talent programs:** Critical assessments of organizational talent identify Farmers’ Rising Talent pool—individuals likely to obtain executive positions. Formal development is cohort-based with a leaders-teaching-leaders model. “Our programs include assessments, coaching, resources, and tools to lead self and others, and sustain a valuable social network of peers who support each other’s aspirations,” Dobrucki says. “Results of these programs have been favorable, with low attrition rates and increased promotion rates.”

**Partnerships:** Farmers partners with Harvard Business and UCLA Anderson Executive Education for top talent development. “Our programs focus on key capabilities of building self, team, and network, as well as competitive analysis, personal assessments, strategic thinking, managing complexity and change, and simulations specific to our business,” Dobrucki says. “Relatively new to our learning portfolio, these programs will build leadership bench strength.”

Farmers Leadership Development Program for MBA graduates: A 2.5-year accelerated leadership development program provides targeted professional development during three on-the-job structured placements within the organization. “We include early executive exposure, stretch, and action learning projects,” Dobrucki says. “After recent successes, we have been asked to double the size of our MBA Leadership pool.”

BEST PRACTICES
*From Clara Lippert Glenn, President and CEO, The Oxford Princeton Programme:*

1. **IDENTIFY THE SKILL GAP THROUGH CAREFUL ASSESSMENT.** Pinpointing a skill gap can be complex. Organizations need to establish first which skills are necessary at each level of position—and then rank each skill as being needed on an expert level, proficient level, or “knowledge of” level. Test employees on these skills, but make the tests fun and easy to administer. And reassure employees that these tests are not done to determine one’s ability to do or keep one’s job but rather are being used to help employees map a future training path to make them the best they can be at their job. These tests then can be used to help develop training programs so that over time, each and every team member becomes proficient and an expert at his or her job.

2. **MAP A PLAN TO FILL THE GAP—STEP BY STEP.** Once the skill gap has been identified, it is critical to construct a realistic and sound plan to address it. Key factors that should be considered include but are not limited to:
   - Budget
   - Training content and level (e.g., basic to advanced/expert level)
   - Training type (instructor-led onsite, instructor-led public, Web-based, or a combination to enforce learning)
   - Training provider
   - Timing

After a well-formulated plan has been prepared, make a big deal about it internally. Show everyone that management is behind it, and make sure all levels of the organization support it.

3. **MAKE TRAINING A “MUST HAVE,” NOT A “NICE TO HAVE.”** From the top down, training must be a company-wide priority receiving support on all levels. Presented as an essential component to future success, training goes from an option to an imperative where there is urgency and accountability. Senior-level management must set and enforce workplace policies that illustrate corporate expectations regarding training.

4. **IDENTIFY MEASURABLE OUTCOMES.** Regular evaluations of workforce capabilities and production are key. Marked improvement in workforce performance should be realized.

5. **DO AS I DO.** Imagine the success of a program where the CEO is sitting next to you while learning. Training should not be presented as a requirement just for new hires or employees switching responsibilities. Training should be embraced on all levels at all times. Frequent training provides all employees with the tools to keep pace with industry changes that can affect the way business is conducted. It is also an excellent teambuilding experience and can ensure that C-level executives stay in touch with the employees they don’t interact with on a frequent basis.
CASE STUDY: The IMG College Brown Bag Lunch Series
Collegiate marketing company IMG College has a sales force of more than 400 employees and strives to be a premier partner of schools, sponsors, licensees, and other business constituencies. In fall 2012, IMG recognized training gaps for its Sales Infrastructure team. This team is the support staff for its sales force and IMG College overall, which includes operations; administrative; various other team members; and the Collegiate Licensing Company, which serves as trademark representative for more than 200 collegiate institutions. IMG’s Sales Infrastructure team sits mainly in the company's headquarters in Winston-Salem, NC, and in an office in Atlanta, GA, and consists of approximately 300 people split almost evenly between the two offices.

The need for training was confirmed after conducting a comprehensive Training Needs Analysis, according to Dudley Commander, IMG College Employee Development manager. More than 30 phone calls and meetings took place to solicit input from senior leadership and middle management. “We continued our audit during four collective meetings with the majority of the rest of our Sales Infrastructure team (two meetings in Atlanta and two in Winston-Salem) to collect feedback on desired areas of development,” Commander says. “After analyzing the feedback from senior leadership, middle management, and the rest of the team, we found numerous common themes.”

Some 61 different topics were identified as skill gaps and areas for development. To strategically analyze and prioritize the topics, “we organized a one-day retreat with both the Training & Development and Human Resources teams,” Commander says. “Our analysis took into account our Total Team Member approach of focusing on the personal, professional, and character development of our people. From the retreat, 12 topics that aligned with our strategic training plan and Total Team Member approach were identified.”

The main vehicle for instituting change was the creation of a new informal monthly learning series focusing on soft skills identified in the Training Needs Analysis, dubbed the “Brown Bag Lunch Series.” Topics have ranged from effective communication to public safety to financial skills. For example, the December 2012 session focusing on teamwork provided both key learnings and a charitable component. Both offices in Winston-Salem and Atlanta donated money to buy 12 children’s bicycles and 12 helmets for both locations. During the Brown Bag Lunch Series sessions, teams of 12 worked on assembling the bicycles. After the team activity, the debrief hit home on the important takeaways of working as a group unified in purpose and execution. The bicycles and helmets then were donated to Toys for Tots, a charitable program of The Marines, an IMG College national sponsor.

Since the first sessions in Winston-Salem and Atlanta in November 2012, the class sizes have averaged 30 attendees. With two classes per month in both offices, IMG has provided approximately 960 individual learning opportunities to date. Sessions for the remainder of 2013 and into 2014 are being scheduled, along with a second Training & Development and Human Resources retreat to make sure that topics are strategically aligned.

This learning series was just a first step in addressing the skill gaps of the Sales Infrastructure team. “We since have provided numerous training opportunities, including negotiations training provided for our Digital team to give them the skills to be more effective when negotiating new digital platforms with our partners,” Commander says. “Another was a two-day combination for our University Services team that has grown into a six-month targeted training program to provide them skills to be effective and proactive partners to our sales staff.”

BEST PRACTICES
From Tim Toterhi, Organizational Development and Change Management Specialist:

1. CONSIDER ALTERNATIVE SOLUTIONS. There are many reasons employees underperform. Before embarking on your initiative, take time to uncover and examine the root cause of the alleged skill deficiency. The initial investigation will save time and improve results.

2. BUILD A BUSINESS CASE. Bridging a skill gap takes time and resources, both of which are in short supply in most organizations. If you want to gain support for your project, you have to begin by demonstrating the need for and bottom-line effect of the effort. You also should be aware of competing projects and be prepared to set yours apart from the crowd.

3. SECURE A COMPARATOR. When building a skill profile, it’s helpful to have an ideal comparator—an example of what excellence in the role looks like. One way to secure this is to look at your consistent high performers and do a time signature analysis to discover what they do differently than average performers. This exercise highlights specific skill gaps while providing key insights into various process elements and work patterns that go beyond classic training issues.

4. AGREE ON PROJECT PARAMETERS. Change doesn’t happen overnight. Once you’ve determined that skill building is the solution to a real, quantifiable issue and have secured a valid example of what success looks like, it’s important to agree with leadership on the timeline for generating improvement. Training, at its core, is about behavior change. Any gym owner will tell you that knowing what to do (exercising) and doing it (hitting the gym) are two very different things. Depending on the size of the gap you face and the relative skills of your “stars” to an external comparator group, you may have to ask yourself the following tough question: Are our best good enough? If the gap is too big to close in the time allotted, you may have to hire from the outside (assuming talent is available) to meet the immediate need.

5. THINK BEYOND TOMORROW. Promising a fix for an immediate, specific need is a good way to get the green light for your project, but Learning professionals also need to see and solve for the big picture. Consider what excellence in the role will require five years from now and build toward that profile, as well. At the same time, take pains to avoid a one-off initiative by embedding the process. Once a role is designed, the business should take ownership of it and actively build in best practices and lessons learned from daily work to ensure it is kept up to date.
CASE STUDY:  
Anthem Blue Cross Blue Shield Participates in CfA Program  
Southern New Hampshire University (SNHU) recently launched a degree program, College for America (CfA), that was designed to help bridge skill gaps. The CfA degree is the nation’s first workforce-driven, competency-based degree program to be approved by the Department of Education for federal funding. The program is offered to students through their employer, and instead of accumulating credit hours and grades, it requires students to demonstrate evidence of mastery through a set of 120 competencies. This ensures that students have acquired the most relevant and necessary workforce skills, including communication, critical and creative thinking, quantitative literacy, collaboration, and teamwork.

The CfA content maps well to necessary skills in the workplace, says Lisa Guerin, president, Anthem Blue Cross Blue Shield, one of CfA’s current 25 employer partners (others include City of Memphis, ConAgra Foods, Cumberland Gulf, Globe Manufacturing, and Northeast Delta Dental). “We are looking to help more of our associates benefit from college-level education in a way that works for them. We have a great tuition reimbursement program, but the reality is that financial constraints and family demands can make it hard for people to take full advantage of the reimbursement. CfA created an attractive alternative, and the interest level from associates for this voluntary program was overwhelming.”

Tuition is an all-inclusive $2,500 annually. Many of CfA’s employer partners provide tuition assistance that covers all or a portion of the tuition costs. For students who must cover their own tuition, CfA has payroll deduction plans, and federal financial aid will be available in early 2014.

The competencies derive from frameworks for academic and workplace knowledge and skills, such as the Lumina Foundation’s Degree Qualifications Profile (DQP) and the U.S. Department of Labor’s competency models, according to Cathrael Kazin, J.D., Ph.D., College for America’s chief academic officer. The competencies are organized into three broad areas: Foundational Skills, Personal and Social Skills, and Content Knowledge. Students demonstrate competencies by successfully completing a project that reflects real-life scenarios students might encounter in the workplace, such as creating a marketing plan or developing a budget. In the future, Kazin says, “we plan to offer additional Associate’s degree programs contextualized for specific industries.”

To complete the Associate’s degree, a student must achieve 20 goals, each made up of five to eight competencies. Every goal a student completes is equivalent to three college credits from Southern New Hampshire University. These credits can be applied to other SNHU degree programs or to programs at other schools. Students receive two transcripts, Kazin says. One provides the competencies the student mastered and the evidence used to determine mastery. The second lists course names and credits.

“The focus of College for America is on learning rather than teaching,” Kazin emphasizes. “Each project comes with carefully curated project and skill-building resources. CfA encourages students to be self-directed and self-motivated learners.”

BEST PRACTICES

From Stan Jackson, Chief Business Intelligence Officer, ConnectEDU:

1. INVEST IN YOUR PEOPLE. Your existing staff is the best source for meeting your growth needs. Retaining people who already know your business and your customers, and who are committed to you, is the most cost effective way to grow your business. Work harder to find your employees who are interested and ready for a new opportunity. Provide them with relevant training to close their skill gaps. Naturally, this doesn’t eliminate the need for new resources, but may allow you to replace newly promoted team members with new hires who require less experience, simpler skill sets, etc.

2. LEVERAGE YOUR APPLICANT DATABASE. Many organizations overlook the value of recent applicants that did not result in a hire. These applicants represent people who aren’t yet working for you, but have demonstrated their interest in doing so. You already have invested in bringing these folks to your front door. Find the closest matches and provide training opportunities to close their skill gaps.

3. FIND MORE LOCAL TALENT. Possible sourcing strategies:
   • Consider building your own talent community.
   • Develop awareness and outreach campaigns to attract the recently and long-term unemployed.
   • Work with local outplacement agencies and large, local employers.
   • Consider developing awareness, outreach, and training programs to repurpose workforces displaced by shrinking industries.
   • SHARE THE WEALTH. A relatively new concept that is gaining some interest is the notion of sharing out applicants you are not likely to be hiring in the near future. Find partners (unrelated businesses, complimentary businesses, and, yes, even your competition) and put in place referral exchange programs. You may be introduced to just the talent you need. And, as for the talent you have referred out, think of the brand credit you will get now that may pay off in your future.

4. REACH FUTURE TALENT POOLS NOW. Engage with local colleges, universities, and secondary school systems with on-campus awareness and recruiting programs, internship programs, and workforce readiness programs. Find ways to have a positive impact on early learners in terms of the educational choices they are making. Find ways to engage with early learners to understand their interests, their learning styles, and their work styles. Emerging workforce cohorts can have archetypical traits (e.g., Generation X, Generation Y, Millennials, etc.), and this insight can be an invaluable influencer of your future sourcing and onboarding efforts.
CASE STUDY:
Developing a Data-Driven Plan
Executives at a multibillion-dollar, privately held global manufacturing organization needed to prepare their talent to execute a new business strategy. The organization urgently needed to get the workforce ready to face new market demands—the driver for the new strategy. With more than 7,000 employees working in 150 countries worldwide, these executives felt they needed data now to inform talent management decisions and best practices for closing their skill gaps.

The organization turned to the Center for Creative Leadership (CCL) for help, resulting in the following approach:
Define. What skills are important for success? “We worked with senior leaders in the company to identify the most critical competencies needed to successfully implement its strategy,” explains Jean Brittain Leslie, senior fellow and director, Applied Research Services, Center for Creative Leadership, Greensboro, NC.

Measure. Compare employees “current skill level” to the “desired future skill level.” “We conducted a skills gap analysis using behavioral measures of the competencies identified. Employees assessed the relative importance of the critical competencies for success in their organization now and in the future and then assessed their ability to perform them,” Brittain Leslie says. The purpose of the online survey was to determine specific areas where employees perceive a shortfall between current and needed leadership capacity. Data were collected from 500 employees across the organization.
Interpret. Identify key gaps now and in the future. Gap analysis data reports were presented in a cascading multi-level approach: leaders at the organization-wide, regional, and local office levels, and then employees at all levels. This reporting and discussion strategy enabled an open dialog necessary for designing action plans. The results were examined by level, location, tenure, age, and gender to further diagnose relative gaps among groups. Clear patterns emerged in the skill gaps present in the company (e.g., leading change, strategic planning, and inspiring commitment).
Take action. Use data to create action plans to close the gaps and execute them. The gap analyses results provided data that supported what executives in the company already suspected. The data solidified their call to action. The results were used to inform the design of a global leadership development system involving individual leader development and organizational leadership work (e.g., leadership strategy, talent, and culture). More specifically, Brittain Leslie says, “we worked with the company’s HR leaders to design and deliver custom leadership development programs that were supportive of the organization’s corporate and HR strategies.” Targeted multi-source feedback and experiential activities represented the core of the custom design process targeting the company’s skill gaps. Additionally, action development projects that focused on real strategic initiatives were used to foster development.
Assess. Evaluate progress. “We worked with the manufacturer to discern the impact of the leadership development initiatives,” Brittain Leslie says. “Interviews with focus groups and analyses of other organizational data were conducted (e.g., employee engagement and organizational culture surveys). Together, we learned how the leadership development initiatives helped achieve the company’s business outcomes.” Ultimately, this approach allowed the company to make objective, data-driven decisions that had the greatest likelihood of achieving its objectives—closing its skill gaps.

BEST PRACTICES
From Gelair Gilson, Director, Talent & Organization Development, ManpowerGroup:

1. REVISIT THE TALENT SELECTION PROCESS and criteria to ensure that candidates with the applicable skills are not being screened out of consideration. Leading companies make a practice of conducting engagement calls at the start of the hiring process between the hiring manager and talent acquisition or recruiting professionals to review requirements, expectations, and essential functions of the role. Many times, requirements are listed for positions that aren’t critical to the role. Candidates may have the core skill set but perhaps lack the experience or expertise in a few areas that they can be trained on with a relatively quick and low-cost solution.

2. ADOPT AN OPEN MINDSET. Leading organizations not only have a strategy of inclusion but a mindset, as well. Accordingly, hiring managers should change or open their mindsets when it comes to evaluating candidates as a match for their roles. Some categories of potentially good hires, such as long-term unemployed and Millennials, often are overlooked because of outdated or false assumptions. Changes in the economy and demographics should change the profiles and our approach to hiring.

3. BUILD YOUR OWN PIPELINE. Organizations increasingly are building active partnerships with educational institutions and community-based organizations to build in-demand skill sets. In some cases, employers are influencing curricula, and in others, they are providing real-world application of what they are learning.

4. CREATE A TRAINING AND DEVELOPMENT STRATEGY. A growing practice is to target high-performing talent in entry-level positions that are more easily filled and up-skill or reskill those individuals to close the skill gap. It is common for organizations to assess talent at managerial and senior levels for the purposes of succession planning for leadership roles. However, skipping a level to include entry-level talent for development can be a great way to develop capability while retaining top talent.
CREATE A LEARNING JOURNEY

By Annamarie Lang, Senior Consultant, Leadership Solutions Group, Development Dimensions International, Inc. (DDI)

We all know that development initiatives need to build better knowledge, strengthen skills, raise engagement, and, ultimately, achieve business results. But how often are these goals achieved? One way to achieve your own training goals is to create a Learning Journey, a strategic development approach anchored in business strategy but with practical application. It generally is intended for cohorts or groups of learners and takes place over time. Additionally, a Learning Journey incorporates multiple formal and informal development components into a design that optimizes the training investment, maximizes “stickiness,” moves toward behavior change, and, most importantly, produces positive business outcomes.

Here are five questions to help you review your current training approach and make Learning Journeys successful:

1. Does your organization create training initiatives that are tied to business outcomes, connecting your leaders to your business and your business to their development?
2. In your design, are you going beyond sequencing courses to address competencies?
3. Does your learning plan consider the before and after elements surrounding training to ensure sustainable development?
4. Have you identified simple yet effective measurement tools to show behavior change?
5. Do you have a graphic learning map to aid in the marketing of your approach within your organization?

If you answered, “No,” to any or all of these questions, consider taking a Learning Journey approach to your training and development initiatives. The creation of a Learning Journey requires a methodology rooted in instructional design and organizational development principles. It is important to base it on strategic and cultural challenges facing your organization and the actions learners need to take to drive the business forward.

A Learning Journey approach offers many benefits for you, your learners, and your organization, including: ensuring alignment between development solutions and the organization’s strategies; spanning boundaries to promote networking; producing new perspectives, self-awareness, and a mastery of skills; optimizing your learning components; and providing clear pathways of action for immediate application by learners.

Clearly, the HOWs of training—the design, delivery, and implementation—matter. We need to manage our training initiatives in the same way that other areas of the business manage their initiatives, and the Learning Journey can help make that happen.

To read the other articles in the Skills Gap series, visit:
http://trainingmag.com/content/bridging-skills-gap
http://trainingmag.com/content/skills-gap-part-2-schooled-skills
http://trainingmag.com/content/skills-gap-series-part-4-tech-factor

BEST PRACTICES

From Elissa Tucker, SPHR, Manager, Human Capital Management Research Program, APQC:

1. SPEND TIME ON WORKFORCE PLANNING. Each spring, IBM establishes a five-year corporate strategy and five-year business-level strategies based on market trends and technological developments. The HR implications of these long-term plans are determined and used to establish long-term workforce goals. Critical job roles and skills are identified, and long-term HR priorities are created. Then each fall, IBM creates short-term corporate and business-level strategies. These one-year strategies are used to craft headcount plans. The headcount plans factor in anticipated hiring and attrition, quantify skill gaps, and specify how the gaps will be closed. HR programs for developing, hiring, contracting, and/or outsourcing talent over the coming year are outlined, and required investments quantified.

2. COMMUNICATE COMPETENCY REQUIREMENTS AND DEVELOPMENT OPTIONS. At Schlumberger, each job has a set of required technical competencies. Employees rate their proficiency on these competencies annually. Managers and technical peers verify the ratings. Managers then use the ratings to identify skill gaps and set training requirements. Employees can use the competency system to plan their careers. Every two years at Schlumberger, committees of technical experts and HR representatives review and update the competencies and proficiency levels.

3. LEVERAGE TECHNOLOGY. Caterpillar offers an online tool called CareerQuest, which helps employees assess their competencies, determine areas in need of development, and obtain suggestions for on-the-job experiences that they can use to develop proficiency.

4. TRANSFER KNOWLEDGE. Helping IBM employees locate and exchange expertise are technical communities led by subject matter experts, an online employee directory, and blogs and wikis. In addition, IBM offers three types of mentors to technical talent. Socialization mentors share information about IBM tools, technologies, policies, and practices with new hires. Career mentors help employees explore career options at IBM and construct plans for achieving career goals. Expert mentors nurture critical skills in other IBM employees.

5. TRAIN AND DEVELOP ON THE JOB. At Lockheed Martin SSC, 70 percent of employees’ knowledge comes from job experiences. The remainder comes from training, mentoring, and coaching. Each on-the-job learning experience an employee completes is documented in a database and linked back to the skill-set requirements for the appropriate line of business. Using the database, employees and managers can identify projects that will build specific skills.