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Talent & Organization Performance

Solving the skills crisis

By Norbert Büning, Susan M. Cantrell, Breck T. Marshall and David Smith

The broad availability of workers in the midst of the economic downturn can be misleading, and many executives are only beginning to appreciate the scope of the challenge they face when it comes to finding the *right* skills to compete in the years ahead. Companies must get out in front of the skills challenge, building an arsenal of altogether new solutions.

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Here's a cautionary tale.

In 2001, a US medical device maker expanded its product line to include a new heart defibrillator it had acquired from another company—despite the fact that it didn't have the manufacturing and engineering skills needed to meet the strict regulatory requirements associated with marketing the new product.

Although managers put hiring and training programs in place to close the skills gap, they weren't fast enough. Five years later, the US Food and Drug Administration discovered that during the first year of the product's life, the company's quality engineers had not met federal government requirements, due to inadequate knowledge and skills. Skepticism about the product's safety swiftly followed, and in 2010, the business had to be sold.

Interesting, you say, but not your problem. After all, with global unemployment at near-record levels, there's obviously a huge pool of qualified talent out there, in practically every discipline, just waiting to be hired . . . right? Wrong. The medical manufacturer had discovered what thousands of companies—across industries, geographies and types of workforces—are currently experiencing: New skills requirements cannot be met by old, traditional methods.

Counterintuitive though it may seem, about a third of employers worldwide are experiencing critical challenges filling positions due to a lack of available talent, and almost three-fourths of employers are affected by talent shortages to some degree. The people are there, just not the right people—those with the knowledge, skills and abilities companies need, right now.

It's a situation with potentially grave business consequences. For many companies, skills gaps have

resulted in delays in product releases, reduced customer satisfaction, loss of revenue and, sometimes, the demise or sale of the business. In a rapidly changing world where talent is increasingly what propels an organization ahead of the competition, organizations are finding that their ability to quickly and effectively develop skills they need is one of their most important competitive differentiators.

Doing nothing is not an option, nor is making only incremental improvements. If companies are to generate a new period of growth, they must adopt new strategies to ensure they have the skills they need to succeed.

Multi-talented

The talent landscape has changed in several important ways.

First, today's knowledge-driven, technology-oriented economy demands that workers have skill sets that are both more advanced and more specialized. Yet at the same time, as companies expand their global presence, job seekers must also meet a breadth of additional requirements that go beyond their specialized skills, including broader functional capabilities, industry expertise and knowledge of particular geographic markets.

Even assembly-line positions in auto plants now require a mix of skills: the technology, communication and problem-solving capabilities to enable workers to operate advanced equipment and solve quality problems on the front line. The term "unskilled labor" has all but disappeared from the business vocabulary.

In short, the knowledge environment makes it much harder to find the right person for the job.

Nor are educational levels what they need to be—an issue plaguing

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nations and companies both East and West. For example, a recent *Wall Street Journal* article told the plight of a call-center company looking to hire 3,000 new employees in India. The company discovered that few of the thousands of high school and college graduates who applied possessed the reading comprehension and basic business capabilities needed to perform at satisfactory levels. Ninety-seven percent of applicants were turned down. In the United States, employers report that as the country’s educational focus has shifted to four-year college degrees, traditional trade schools are no longer producing the skilled laborers companies need.

Finally, as the pace of marketplace competition accelerates, finding the requisite skills becomes ever more urgent. As customer demand fluctuates and as companies drive new products and services to market faster than ever, they need to tap workers on demand, pulling in skills wherever and whenever needed. This can be difficult in an era when competition for talent has gone not only cross-industry but cross-border as well. Finding

and keeping talent is more challenging than ever.

Solutions that merely retool old approaches can put organizations at risk. Traditionally, the answer to finding needed skills came down to three choices: make, buy or borrow. That is, organizations could train their own people, hire from the outside or use temporary staffing or outsourcing to fill their needs.

Today, it’s no longer a matter of “or”—the skills crisis is so severe that organizations must now make *and* buy *and* borrow in a holistic, portfolio approach. Multiple, simultaneous solutions are required, including new and creative ones such as redesigning work completely, mining for hidden skills in their own organization or, ironically, thinking beyond skills entirely and looking more at issues of “teachability” and fit.

Based on our research and conversations with executives, six innovative solutions are available to organizations that, combined in different ways, can close skills gaps more quickly and give companies a competitive edge.

Strategy No. 1: Think competencies and fit, not just skills

Focusing too narrowly on highly specific skills is important if you’re hiring a heart surgeon but less important in most other cases. Organizations may complain they can’t find someone with experience implementing SAP Accounting 4.6, for example, but that mindset might cause them to overlook top-performing internal or external candidates who don’t have those key words on their résumé but who could readily perform that job based on their

knowledge of accounting or of other packaged software programs.

By focusing on the notion of “developable fit”—a more fluid approach to matching people with needs—organizations can find people who, with just a little additional training, can perform the highly specific skill requirements of the job.

Specific skills backgrounds have also been proven repeatedly by

organizational psychologists to be one of the least important predictors of job performance. Far more accurate in predicting performance are, first, competencies (a person's general communication ability, for example, as compared to specific expertise in PowerPoint presentations) and, second,

cultural fit with the organization. Indeed, one of the competencies shown to have a high correlation with performance is learning aptitude—the ability, as well as the willingness, of people to learn quickly and easily.

Strategy No. 2: Use new recruiting and hiring techniques to attract the skills you need

A number of important innovations are emerging in the recruiting and hiring fields that can make it easier to find top-performing, skilled talent on a global basis, quickly and more cheaply. Recent company experience suggests a number of ways to take advantage of these new techniques.

Use social media platforms to find talent yourself

Instead of relying on expensive headhunters or job postings, many organizations are moving toward identifying the ideal candidates through social media sites such as LinkedIn or Taleo Talent Exchange, and then contacting those people directly, often with customized employment offers.

When gaming company Red 5 Studios was struggling to compete with large technology companies for skilled developers, for example, it didn't post a job opening at all. Instead, it identified a list of ideal candidates, learned what it could about each, and then created individualized employment pitches that were recorded on iPods sent to candidates in attention-grabbing Russian-doll-style nested boxes.

Identify and filter people by looking beyond what's listed on their résumés

Numerous studies have found that screening people by looking for key words on a résumé is not an effective way to predict performance. Such an approach can also lead companies to cast their nets too narrowly, missing potential top performers. New startups are emerging to help companies alter that approach inexpensively, teaching them how to use competency, skills or cultural fit assessments on the front end of the screening process to supplement the initial, résumé-based screening.

Other companies, including Google, are broadening their search for skilled people by screening candidates based on the quality of their work or their personal biography—not only where they went to school or what work experiences they've had.

The company might, for instance, ask a series of detailed biographical questions shown to be statistically correlated with top performance at the company: Have you ever set a world record in anything? Have you ever started a club? What Internet mailing lists do you subscribe to?

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New ideas for closing the skills gap

Old idea	New idea
Reactive, supply-side skills fulfillment	Proactive, demand-side skills fulfillment
Long-term, static planning initiatives that determine when and where skills are needed	Just-in-time deployment of skills when and where they are needed
Long lead times for skills development, with skills relevance measured in years	Just-in-time development of workforces, with skills relevance measured in weeks or months
Skills development consists of expensive, formal, primarily classroom-based programs	Skills development focuses on constantly refreshing skills through learning opportunities embedded in everyday work
Hiring decisions based on specific skills need	Hiring decisions based on general competencies and capabilities required, then providing learning opportunities for specific skills, if needed
Static, traditional job design, with training and hiring to match	Fluid or redesigned jobs, with job design changed to match talent pools and evolving skills demands
Make, buy or borrow approach to skills development	A portfolio of solutions, including make, buy and borrow—and including alternative solutions such as redesigning work altogether or defining skills requirements more broadly
Educational institutions provide a pipeline of future talent	Actively develop a pipeline of talent yourself—by partnering with educational institutions and other companies to develop curriculums
Talent pools restricted to a company's industry and geography	Talent pools can come from any industry or geography
Recruits are expected to look for and find a company	Companies actively look for and pursue the talent they need
Find and filter potential hires based on experience and education listed on a résumé	Find and filter potential hires using new techniques, including data-based assessments, biographical data to predict success, work simulations and competitions
Engage with potential job candidates only when you are hiring for a specific job	Form rich, two-way relationships with a pool of potential job candidates before you need them
Use a staffing agency to find traditional contractors to fill in skills gaps	Use a "talent in the cloud" model to gain access to skills quickly and without paying a middleman—or create a proprietary pool of contractors yourself or with other companies in a consortium model
My employees are my employees; yours are yours	Temporarily borrow skilled employees from another company—and let others borrow yours
Assume you must look to the outside when missing skills	Identify and mine hidden skills in your own organization
Keep employees where they are—because they are creating value already and their manager doesn't want to let them go	Fluidly move skills to where they are in demand internally in an open-market format

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Google also stages work competitions (for software coding, for example), with the winner getting the open position.

Accenture envisions new Internet companies that will work much like a dating service. This would enable closer matches between job candidates and companies, through profiles that contain such information (properly protected and secured) as samples of actual work, assessment scores, answers to biographical questions, competition results, pre-recorded videos with answers to common behavioral interview questions, work motivators and interests, geographic preferences and more.

Forge relationships with potential employees before you need them

When 3D design software company Autodesk was having trouble finding skilled candidates, it realized that it needed to proactively build relationships with potential hires on an ongoing basis.

Explains Matthew Jeffery, head of talent acquisition, “It’s all about opening up a conversation to create a talent pipeline. This doesn’t mean just posting your jobs on Facebook; it means revealing your culture, how people are having fun, what the jobs are really like, even the silly things that go on in your office. It’s about being authentic and transparent, and engaging your own employees to be a brand ambassador in a human way, and helping build emotional connections.”

By actively engaging in conversations with candidates, Autodesk built a Facebook community of more than 150,000 members in just 12 months, creating an active and interested talent pool to draw

from when the company is ready. Candidate relationship databases that work much like customer relationship marketing databases can also help a company send periodic tailored information to interested parties, creating ongoing relationships a company can tap into when opportunities arise.

Hire from alternative talent pools

Increasingly, companies are finding innovative, off-the-beaten-track ways to find skilled people. One way of achieving this is to target selected industries with a surplus of workers.

In the United States, for example, healthcare companies have worked to retrain displaced autoworkers. Entergy Corp., a US energy company, targets ex-military personnel to fill positions as varied as repair technicians and nuclear engineers. JetBlue Airways staffed its reservations department with mostly stay-at-home workers who can take reservations while still caring for their households.

Organizations are also increasingly targeting workers in different geographic regions, including countries where the companies are not headquartered, where there is a surplus of talent in specific skill sets.

Partner with schools to help develop the skills you need

An often gaping disconnect between what a student learns in school and the needs of employers contributes significantly to the global skills crisis. But today, leading companies are working with universities, community colleges and trade schools to develop a pipeline of people to recruit years before they need them.

For example, HCL Technologies, an Indian-based global technology

services company, has entered into collaborative partnerships with 25 top engineering colleges in India. Managers at HCL review the curriculum and offer input to the colleges, which then tweak and revise the courses as needed to meet the company's requirements.

HCL also works as a member of the national consortium of IT companies called NASSCOM (National Association of Software and Services Companies), helping to define and communicate the skills required in the industry, including the levels of supply and demand for those skills.

Strategy No. 3: Borrow talent in creative ways

Borrowing talent doesn't just mean partnering or using temporary staffing companies to fill skills gaps. A number of innovative new practices in the staffing space are creating opportunities for organizations to easily and quickly tap into skills outside of the company, enabling them to create a cadre of "just-in-time" workers to be deployed when and where the organization needs them. For example, companies can now tap "talent in the cloud"—web-based offerings such as LeadVine, TopCoder or Amazon's Mechanical Turk—to get instant access to a vast number of flexible, skilled and cost-effective individuals who can perform work on a transactional basis.

Other companies are creating their own pools of prescreened, reliable talent they can tap as needed on a contract basis. People in such pools are often former employees seeking greater flexibility as they enter child-rearing or retirement years; they can hit the ground running because they

already have up-to-date skills and existing networks in (and knowledge of) the company. For example, The Aerospace Corp., a US defense contractor, and global financial services company Principal Financial Group have designed talent programs where retirees can work on a project-consulting basis.

On the horizon is another innovative way of handling the ebbs and flows of demand for particular jobs like call-center representatives or software engineers: loaning employees from a company with a temporary decrease in demand to one with a temporary need. Although this approach is in its infancy, there are signs that such a model may catch on. For example, in 2008, Google and Procter & Gamble initiated an employee swapping program—albeit one that was designed to spur innovation and knowledge transfer rather than to cope with changes of supply and demand for skilled talent.

Strategy No. 4: Mine your own organization for hidden talent

Many companies are surprised to learn that the skills they need already exist within their organizations. Creating a database of employee capabilities and talents

is essential to mining your own organization for ongoing skills, as is creating processes to support inter-

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Missing skills

Skills shortages aren't confined to just a few industries. Here are some examples of how skills gaps manifest themselves across different types of companies.

Industry	Skills gaps	Reason for skills gaps
Hotelier	Service staff with problem-solving capabilities, IT skills, communication and customer interaction skills, and the ability to anticipate customer needs and proactively address them on the front line	Service staff needs to more flexibly serve the changing needs of the business and leisure traveler (for example, help customers connect electronic devices); all employees are becoming "front office" employees to help solve customer problems; all employees who interact with customers need to deliver a "brand experience"
	Cross-cultural managerial and service skills	Expansion into emerging markets
Document handling and shipping company	IT skills, data and analytic skills for systems and solutions that are both digital and physical	Transformation from analog to digital business model—services in digital communications and analytic capabilities
	Cross-functional and solution selling skills	Customers demanding more integrated services
	Ability to work with both the mechanical and digital aspects of complex integrated products and services—both in the servicing of them and in the development of new solutions	Need to flexibly deploy people as needed
Media company	For all workforces: IT skills and knowledge, cross-functional skills and the ability to flexibly respond to rapid change	Transformation from print to digital media and need for integrated solutions for customers
	For specialized IT roles: Skills including search engine optimization, e-marketing, user experience and Internet training	
	Global teaming, geographic-specific skills	Penetration into emerging markets, distributed work teams
Retailer	Store managers: skills in strategic insight, change management, customer and results orientation, analytics, intercultural communication	Business model change to a more decentralized, customer-centric, integrated, seamless business penetrating new geographic markets; increased importance of analytics and modeling in retail
	Managing directors responsible for stores in a country: country-specific knowledge, retail industry knowledge, cross-functional skills (procurement, logistics, real estate, logistics, etc.)	
IT services provider	Engineers and technologists whose functional and technical skills are complemented by strong business skills, industry skills, cross-cultural teaming skills and often knowledge of specific geographic markets	Need to deliver tailored technology solutions to customers going beyond a mere general application of technologies; penetration into new geographic markets

Missing skills

(Continued)

Industry	Skills gaps	Reason for skills gaps
Financial services company	Bankers with broader knowledge and experience in all financial products: cash, credit, mortgages, investments, foreign exchange, derivatives, real estate, wealth planning; bankers with global teaming and intercultural skills	Shift to a more customer-centric business strategy; need to deliver an entire suite of products to the client, in part driven by penetration into emerging markets
	Innovation skills in multiple workforces	Need to find new ways to differentiate the bank against competitors and grow
Food products company	Product innovation, analytics across multiple types of workforces	Business-model shift to serving customers who are more value conscious; need to attract customers with a new value proposition; need for imagination and leadership in workforces beyond product developers
	Learning agility	Need to adapt, flexibly respond to changing customer demands, and learn new skills

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nal job mobility. Proper incentives can encourage employees to move into different internal roles based on changing skills needs, or to develop more timely and relevant skills.

For example, financial services company Citigroup recently implemented a number of processes and technologies to support internal job mobility. This included a new talent marketplace called Citi Careers, a self-service website that helps people understand the benefits of moving to different areas of the bank to meet changes in demand or develop a broader portfolio of skills.

Explains Joe Weldon, managing director and head of global learning and development at Citi, “To achieve our business strategy of providing Citi’s full capabilities to a growing

client base in emerging markets, we need people with broad knowledge across the suite of solutions Citibank offers. So we needed a way to rotate people across different company roles to develop a more robust portfolio of skills in each individual. This has been a huge cultural shift. For example, recent graduates coming out of school wanting to become investment bankers are sometimes reluctant to rotate into altogether different positions. This program helps them understand the benefits of broader skill sets.”

Companies also need to keep their employees informed—through employee meetings, corporate communications and personal contact with supervisors—about changing skills demands within the organization. Yet surprisingly few companies do this.

Strategy No. 5: Tap into learning innovations to more quickly develop the skills of your own people

Development and learning have often been seen by executives as costly processes with long lead times between identifying the skills required and implementing those skills in the workforce. No longer. Recent innovations have made it easier for employees to continuously learn needed skills in the context of their everyday jobs.

Take the experience of Hilton Worldwide. The hotel chain asks service staff—everyone from housekeepers to desk clerks to managers—to learn new technology skills so they can help guests with basic computer questions and needs.

Although the company provides formal training via its e-learning facility, Hilton Worldwide University, it relies primarily on just-in-time training solutions using consumer technologies. Service staff used to have to stop work to attend training or access a computer; now, for example, iPads that are passed around by service staff enable workers to integrate learning with their job. When employees have a problem,

they simply look up solutions used by other service workers that are posted on corporate versions of Facebook or YouTube; they can also access short, bite-sized learning applications immediately relevant to their current need.

Another way companies build specific skills in a short time-frame and on a global scale is the “learning academy,” which focuses on delivering relevant, action-oriented content for specific workforces.

For example, brewer and bottler SABMiller has used the Accenture Supply Chain Academy to improve the skills of its supply chain professionals. The academy approach appealed to the company because it goes beyond traditional training programs that too often teach only generic supply chain concepts. Jaime Ochoa, SABMiller’s director of supply chain for Latin America, notes that “we are using the Supply Chain Academy to identify specific maturity gaps, fill them with tailored content and measure the impact of that training on the business.”

Strategy No. 6: Redesign skills by redesigning the work

A final, and frequently overlooked, solution for solving the skills gap is to redesign work itself—to either require fewer skilled people or create more flexibility in terms of how skills can be deployed. There are at least a couple of ways to restructure work to accomplish this.

Consolidate skilled tasks into fewer positions

AltaMed Health Services Corp., the largest independent community health center in the United States, faced problems recruiting highly sought-after registered nurses. In response, it entirely redesigned its jobs to concen-

For further reading

"Different strokes: How to manage a global workforce," *Outlook* 2011, No. 2

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trate the most highly skilled portion of the work into a smaller number of critical jobs. This enabled the organization to hire more people for positions with lower skill requirements.

Instead of having registered nurses interact directly with patients, for example, the organization placed them in leadership and teaching roles, where clinically appropriate, to oversee licensed vocational nurses and certified medical assistants, positions that require significantly less training and skill levels, but for which there is a greater supply of talent. The center has been able to address an important workforce issue without compromising the quality of patient care.

Restructure jobs so they more fluidly match business needs

Traditional mindsets have emphasized jobs and titles rather than actual work needs. But by thinking in new ways, companies can actually expand the relevance and reach of individuals and their skills. One way to do this is by moving people around more fluidly, from project to project, based on rapidly changing business needs instead of on the notion of who is "owned" by which part of the organization.

Companies today must move quickly to close their skills gaps, or risk losing market position to formidable competitors that can more nimbly ensure they have the skills they need when and where they need them.

The broad availability of workers in the wake of the economic downturn can be misleading, and many executives are only beginning to appreciate the scope of the challenge they face when it comes to finding the right skills to compete in the years ahead. Companies must get out in front of the skills challenge, building an arsenal of new solutions. Approaches that simply reuse past assumptions and solutions will put organizations at risk, as will merely incremental improvements in old models. Recent innovations in internal mobility, job and work redesign, learning, sourcing and hiring have made the age-old "make versus buy" workforce equation an altogether different one than it has been in the past.

Companies that tap into these innovations can move out in front of competitors by creating a true talent advantage.

One global software and high-tech company, for example, now allows its employees to moonlight internally—on special projects inside the company but outside their core jobs. Previously unheard of in the industry, this approach is now being adapted so that when a need arises, the company can quickly tap seasoned, skilled workers they already know and trust, while providing a variety of interesting work and extra income for the employees.

Another approach is to define jobs more broadly. Instead of disaggregating work into smaller, defined projects, some organizations are going in the opposite direction and defining jobs so broadly that individuals or their managers are free to apply their skills based on demand. For example, the US Navy was able to deploy skills more flexibly by creating broader, more generic job descriptions. A sailor once officially designated a "submarine electronics specialist" might now be more broadly defined as an "electronics technician"—someone who can work on an aircraft carrier, an onshore installation or a submarine, depending on the Navy's needs at a given point in time.

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