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Preparing for a new era of knowledge work

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Global competition, emerging skill shortages, and changing demographics will soon force companies to use their most highly paid talent more effectively.

The past three decades saw companies in developed economies make huge strides improving the productivity and organizational performance of an array of jobs. Aided by advances in technology and digital communications, companies automated, reengineered, and outsourced numerous tasks that had once required full-time, on-site employees. The trend, which began on production floors, moved next to offices, where a range of transaction-based jobs that could be standardized or scripted were automated, shifted to workers in low-wage countries, or both.

Through all such changes, a broad swath of employment remained largely untouched: work requiring extensive human interactions. Among these positions are the jobs held by knowledge workers—the doctors, engineers, lawyers, managers, sales representatives, teachers, and other skilled professionals who together serve as the engine of the knowledge economy. Research from McKinsey and others has shown that such interaction workers are vital to the competitive success of companies and countries alike.[1] Interaction work is the fastest-growing category of employment in developed countries, where it already accounts for a large proportion of jobs

[1]For example, see Bradford C. Johnson, James M. Manyika, and Lareina A. Yee, "The next revolution in interactions," mckinseyquarterly.com, November 2005.

(Exhibit 1).[2] Because technology has tended to complement, not replace, labor in interaction work, until recently many of these jobs had essentially been performed in the same ways for decades.

Not anymore. Today, interaction work is at an inflection point as global competition, emerging skill shortages, and changing demographics force companies to use their most highly paid talent more effectively. Employers in advanced economies may soon, for example, be unable to find as many college-educated workers as they require. Research from the McKinsey Global Institute finds that in the United States, the gap could reach 1.5 million graduates by decade's end. China, where many global companies have staked growth plans, faces a shortage of 23 million college-educated workers in 2020 (for more, see "Talent tensions ahead: A CEO briefing," on mckinseyquarterly.com).[3]

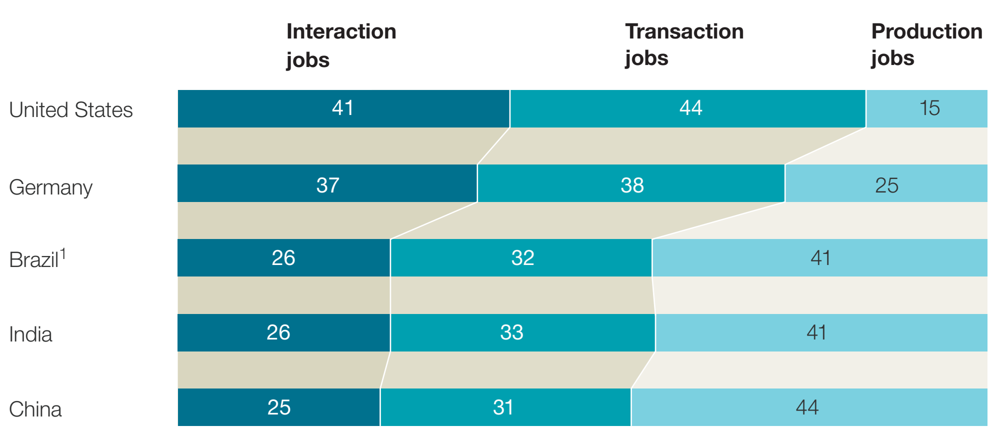
[2] In the United States, for example, interaction work accounted for nearly all net new job creation over the past decade and now characterizes more than 40 percent of all jobs.

[3] For the full McKinsey Global Institute report, see *The world at work: Jobs, pay, and skills for 3.5 billion people* (June 2012), on mckinsey.com.

Exhibit 1

Interaction-based work represents a significant proportion of jobs in developed and emerging markets alike.

% of workforce



[1] Figures do not sum to 100%, because of rounding.

The causes of this looming talent crunch are diverse. In some advanced economies, notably Japan, stagnant population growth means there soon won't be enough young workers to replace retirees. The underrepresentation of women, particularly in the ranks of managers and executives, remains a problem in some economies, notably Germany.[4] And despite technological advances in communications, geographic mismatches persist between the supply of workers and the demand for them. In the European Union, for example, different national systems of professional certification, as well as language and cultural barriers, make skills hard to transport. Mismatches occur within national borders as well: even in the traditionally more flexible United States (where labor mobility is at a 50-year low) the unemployment rate was 11.6 percent in Nevada in May 2012, versus 3.9 percent in Nebraska. (A new report by McKinsey and The Conference Board, *The state of human capital 2012: Why the human capital function still has far to go*, available on mckinsey.com, examines opportunities for companies to better manage the global talent pool in an unpredictable business environment.)

A changing world

Against this backdrop, leading companies we've studied—in aviation, business services, financial services, health care, high-tech manufacturing, and other industries—are exploring ways to revamp how, where, and by whom interaction work is performed. Companies that succeed in these efforts will enjoy productivity gains, greater flexibility in responding to opportunities, and better access to scarce talent. But to get there, they must rethink how they manage their workforces. Let's look at three approaches companies are taking, along with the implications for managers.

1. Break jobs down

Nearly all high-skill interaction jobs include tasks that can be hived off to allow the best-paid workers to focus on the most value-creating activities. A classic example was the introduction of paralegals into the legal profession, relieving attorneys of research and litigation-

[4] Germany, for instance, could fill up to one-third of its coming talent shortage if it raised the share of women working full time to the level of countries such as Sweden.

support tasks while allowing them to spend more time in the courtroom or serving clients. This shift created a middle-income profession that now employs more than one-quarter of a million people in the United States. Medicine is a field that is ripe for this type of job modification. In a study of primary health care clinics in the United Kingdom, for example, providers found that with a mix of 40 percent physicians and 60 percent nurses and other health providers—the opposite of the existing mix at the time—it was possible to improve patient satisfaction while delivering the same quality of care at much lower cost.

Traditional corporate line positions are also splintering. An obvious example of the disaggregation that's been under way for some time comes from the human-resources (HR) function, now being broken into disciplines such as compensation, recruiting, and benefits administration. Specialists (who may be full-time employees, contractors, or employees of service providers) can bring the expertise that generalists lack, often at a far lower cost. At the security software company Symantec, for example, call centers and an online portal support routine HR tasks. Specialists can therefore help business units with higher-value activities, such as hiring and training employees and developing long-term workforce strategies. (For more, see "The evolution of work: One company's story," on mckinseyquarterly.com.)

We believe the trend to disaggregate jobs will pick up speed as skill shortages take hold. The effects will be most strongly felt in corporate roles, such as marketing, that are quickly being transformed by digital technology. In such cases, breaking jobs down into more specialized tasks will not only help companies economize on scarce talent but also make it possible to perform those tasks more efficiently and effectively.

2. Go virtual

Employers first began ramping up their use of remote-work arrangements in the 1990s, in part to retain the services of mothers who preferred not to commute or who wanted to work part time. As technology evolved, companies such as IBM found they could eliminate permanent offices for sales reps and other customer-facing employees. Such moves yielded huge cost savings on real estate while increasing the time reps could spend with customers. Now, thanks to broadband, cloud computing, and a burgeoning market for online collaboration tools, many more jobs that once required in-person interactions can be performed anywhere. These jobs range from administrative assistants and insurance claims processors to law associates and corporate workers in functions such as finance or HR. In fact, by some estimates perhaps one-quarter of all US jobs could be performed remotely, and in our 2011 survey of 2,000 US businesses, one-quarter of them said they planned to use more remote workers in the future.[5]

Increasingly, new hires may not even come into the office for training, which is also delivered electronically. And because the rites of social media are so familiar to many employees, members of remote teams and their managers often establish relationships quickly. “It was a year before I ever even met one remote hire face to face,” said a manager we talked to. “But I felt like we had been colleagues for years.”

Virtual approaches to work are attractive to a wide array of employees, including working mothers, older workers, and younger, Generation Y professionals who want flexible lifestyles from the start. Younger workers are often particularly suited to work remotely, having grown up socializing and collaborating online. “They don’t want to work 9 to 5,” says Bonny Simi, vice president of talent at JetBlue, “and it doesn’t matter to me if they work better from six at night until three in the morning or if they can do the work in six hours instead of eight.”

3. Make work more flexible

By breaking some jobs into components and using technology to virtualize others, employers can engage labor far more efficiently. Some companies are already exploring a spectrum of mix-and-match work arrangements: traditional full-time workers in the office, part-time or temporary workers, and contingent, remote workers who can help meet spikes in demand. Companies that optimize such configurations and manage them effectively can begin engaging talent as needed, thereby lowering overhead costs and improving

[5] For the full MGI report, see *An economy that works: Jobs creation and America’s future* (June 2011), on mckinsey.com.

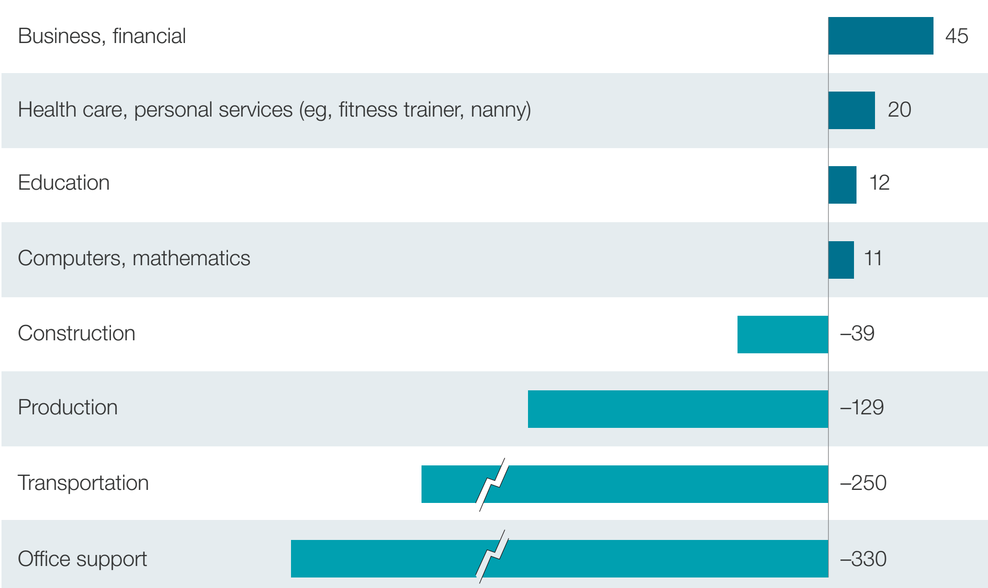
response times. The key to this talent-on-demand model is the availability of workers with specialized skills who are willing to work on a contingent basis.

The workforce appears ready. An expanding industry of intermediaries and “talent aggregators” has cropped up to supply interaction workers ranging from drug-development scientists to advertising copywriters to investment bankers and attorneys. In the United States, 45 percent of temporary employees work in management, in IT or technical occupations, or in health care, and contract work has grown four times faster than total employment over the past decade. Moreover, while many less-skilled temporary workers were laid

Exhibit 2

The mix of contract workers is shifting toward highly skilled professions.

4 largest job gains and 4 largest job losses out of 22 occupations in the employment-services industry, 2002–10, thousands of jobs



Source: American Staffing Association; US Bureau of Labor Statistics; McKinsey Global Institute analysis off during the recent recession, contingent work among more highly skilled professionals has continued to grow (Exhibit 2).

Implications for senior executives

Savvy senior executives will recognize that managing the shift currently under way is analogous to leading a major change-management program and that managers, at all levels, will be the ones most keenly affected. The first priority for executives seeking to lead their organizations into the new world of work should be helping their management teams improve—or in some cases develop—abilities such as these:

- *Coordinate and sequence*. Managing diverse groups of on-site and remote employees will be challenging in a world where the composition of teams changes rapidly as project-based contractors and temporary staff come and go. Managers must become nimble coordinators and better coaches to ensure that all tasks, wherever they occur, mesh smoothly and that information is shared effectively among colleagues. Group interactions, in particular, will require more careful planning and structuring.

- *(Over)communicate*. Some companies require offsite workers to be available for a certain period each day to handle team catch-ups and check-ins with colleagues; other companies set aside regular times for in-person meetings. "You really have to over-communicate to make sure everyone understands their roles and when work will be handed off," said one manager we spoke with.

- *Observe and listen*. While some employees thrive in independent, remote work environments, others wither in the absence of daily contact with coworkers or the camaraderie of working in a traditional team. Likewise, some managers worry that remote workers will identify less fully with their companies. "You save money, but you lose control," warned one executive. "We're worried about loyalty, about identification with the company. If they work from home anyway, will they go to a competitor for just a small bump up in salary?" The best managers will vigilantly observe how their people adjust and respond accordingly.

- *Let go*. Some managers already struggle when they evaluate the performance of knowledge workers. It's a perennial challenge to judge employees on outcomes, not hours, since defining clear goals and determining reasonable time lines are difficult. Yet in an environment where some employees work in a central office and others are time zones away, managers have no choice but to define goals and step back. "Bosses need to just relax," observes JetBlue's Bonny Simi. "They don't have to see the employee for the work to get done. That's the hardest shift in mind-set for some managers."

As with all change programs, the role of senior management will include communicating a clear rationale for any moves and creating a compelling vision of how they will help the company reach its goals. Managers must be convinced of the benefits—higher performance for their teams—if they are to become enthusiastic leaders of change. Above all, senior executives should encourage managers to think big: the new world of work opens up new possibilities for how companies define their boundaries and organize work. Distinctions among employers, employees, and customers are blurring. Innovation happens and tasks get done in new ways. Companies that take advantage of these trends—and indeed pioneer them—can lower their costs while significantly enhancing their value proposition to employees.

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