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WHAT'S NEXT:
FUTURE GLOBAL TRENDS
AFFECTING YOUR ORGANIZATION

Evolution of Work and the Worker

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Future Global Trends Affecting
Your Organization

Evolution of Work and the Worker

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The Economist Intelligence Unit

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FOREWORD

In 2013 the SHRM Foundation launched a new strategic-thought-leadership initiative. Working with The Economist Intelligence Unit, we began a multi-phase program to identify and analyze critical trends likely to affect the workplace in the next 5-10 years. After identifying these trends, our goal is to inform “what’s next,” drive evidence-based research and identify solutions for the resulting HR challenges.

We conducted a rigorous process of surveys, expert-panel discussions and analysis to identify key themes. A detailed explanation of this process is available online at shrmfoundation.org/ShapingtheFuture under “Global Trends Identification Process.” The following three critical themes emerged from our work:

1. **Evolution of work and the worker.** The globalization of business, changing demographics and changing patterns of mobility will continue to change the nature of work and the worker.
2. **Engaging and integrating a global workforce.** Cultural integration and clashes/unrest will continue to grow globally, at both societal and corporate levels.
3. **Use of talent analytics for competitive advantage.** Talent shortages will continue to grow globally, requiring HR to become the provider of human-capital analytics for input to strategic business decision-making.

The current report, published by the SHRM Foundation and written by The Economist Intelligence Unit, presents the data and evidence to support and explain theme 1, the evolution of work and the worker. Two similar reports will be released to provide evidence for the next two themes. We believe these reports will provide insights to help progressive leaders of multinational organizations plan more effectively for the future. In addition, this report presents useful background information and data for students and researchers interested in the many questions raised. Additional articles and reports will be created to identify specific implications for HR and to guide future research on these themes.

The SHRM Foundation’s vision is to be the globally recognized catalyst for shaping human resource thought leadership and research. Through this important initiative, we look forward to making that vision a reality.

We encourage you to get involved. Share this information with your colleagues, use it in the classroom, or design a research study to extend our knowledge of these issues. You can also support the initiative with a tax-deductible contribution to the SHRM Foundation. I encourage you to visit shrmfoundation.org/ShapingtheFuture to learn more.

Now, please join us as we explore *the evolution of work and the worker*.



*Mark J. Schmit, Ph.D., SPHR
Executive Director, SHRM Foundation
February 2014*

EXECUTIVE SUMMARY

Key findings from our research into the changing nature of work and the worker include the following:

- **Demographic shifts pose conflicting challenges**

An ageing population is very apparent throughout the developed world, raising concerns that the remaining working population will not be able to bear the strain of increased expenditure on elderly care and pensions. Governments have responded to this reality through immigration and by raising the pensionable age. Meanwhile, much of the developing world is confronting a very different demographic challenge, and is seeking to devise the appropriate education systems to prepare an overwhelmingly young population for the workplace.

- **Young populations neither in education nor employment will elevate concerns of a lost generation and the potential for social and political unrest in the near future**

Many commentators have argued that mass youth unemployment was a contributing catalyst for the recent social and political turmoil in the Middle East and Southern Europe. Similar concerns will arise throughout the world whenever there is insufficient supply of employment opportunities to meet the demand of young populations. With a very significant proportion of the youth population unemployed or underemployed, the future workforce may be negatively impacted and lead to a shrinking labour-force participation.

- **Burgeoning workplace diversity requires sophisticated managerial response**

Diversity is on the rise throughout the organizational world, not just along gender, generational and cultural lines, but in companies' working arrangements with employees. Longer life spans are likely to result in employees staying in the workplace until a later age. Meanwhile, expert opinion and workplace surveys continue to show that *Generation Y* or *millennials*, the cohort of employees who have entered the workplace in recent years, are restless and difficult to retain. Women are poised to enter the workplace in the developing world in vast numbers, posing disparate challenges for companies that have to date failed to find a way to utilize female potential fully. And a substantial proportion of these women will form a part of a growing army of temporary and part-time workers, many of whom are not physically present in the workplace. Such a surge in workplace diversity will necessitate a multi-layered, carefully thought out, managerial approach as companies strive to get the most out of their people in a highly competitive environment.

- **Disconnect between educational standards and organizational demand**

Educational authorities are battling to remold their systems according to the needs of the modern economy. The expansion in tertiary education in the developing world is rapid. China and India alone will account for 40 percent of young people with a tertiary education in all G20¹ and OECD² countries by the year 2020. However, doubts persist about the quality of graduates in certain regions and countries. Technical and engineering skills, and the soft skills that facilitate integration into the workforce, are both deemed in short supply. Major companies are turning to rigorous internal training systems to bridge the gap between education and the demands of the modern workplace. Governments, meanwhile, are moving to relax immigration requirements for the highly skilled.

- **Services sector on the rise globally at the expense of agriculture and industry**

With incomes rising in both the developed and developing world, demand for basic services, healthcare and education increases, resulting in the expansion of the services sector and the declining importance of industry and

¹ G20 countries consist of 19 advanced economies plus the European Union. Collectively, the G20 countries account for 85% of the gross world product (GWP) and 80% of world trade.

² The Organisation for Economic Co-operation and Development (OECD) is an international economic organization consisting of 34 major economies, including 21 European nations.

agriculture. In the developing world, the growth in the services sector has been dramatic. The proportion of jobs contributed by the services sector in China, for example, has almost doubled in the last two decades. In the developed world, the employment share of the services sector has also been on an upward curve, although moving more gradually from a much higher base.

- **Technology transforms workforce composition and culture**

The proliferation of communication technology is slowly diminishing the proportion of employees who work from a central company location. Remote working is on the rise, particularly in the developing world, enabling companies to access a deeper pool of available labor. Technology also allows companies to maintain contact with clients in distant lands, permitting the global expansion they crave. However, the technology-dependent cross-border teams that now permeate major companies throw up wholly new and complex managerial challenges, such as how to exploit cultural differences for maximum economic advantage, while avoiding potential discord and conflict.

- **Wage expectations conflict with increased focus on shareholder value**

While large increases in productivity have created substantial economic growth over the last few decades, workers' wages have not kept pace. Several factors explain this phenomenon. Technological advances allow higher returns with a fewer number of workers; globalization has allowed companies to look for cheaper labor elsewhere; and the focus on shareholder value has led to pressure for higher profits. This pressure on wages is likely to continue, resulting in lower expectations from workers and possibly to reduced expenditure by individuals on education.

- **Inequality on the rise as technology decimates the mid-skilled tier**

Technological advances have also automated many routine tasks formerly performed by mid-skilled workers. At the same time, companies bemoan a shortage of highly skilled workers in certain positions, such as technical workers and the senior executives entrusted with corporate decision-making. With automation of jobs set to expand further as technology advances, and a persistent skills deficit for specialized jobs, inequality is likely to increase, raising widespread concerns about social and political stability.

- **Companies balance pros and cons of investment in new regions of development**

Companies in the developed world are constantly investigating where best to outsource their operations. China's steep rise in wages has made it a less obvious destination for the outsourcing of production. It is likely that India and Brazil will further consolidate their already strong position over the next five years, with relatively new players, such as Vietnam and Indonesia, also becoming more attractive. Central and Eastern Europe, meanwhile, is building its appeal as an outsourcing destination, particularly for highly skilled work. HR managers will need to find sufficiently reliable data and analytics about human-capital issues in new potential markets in order to make sound strategic business decisions and minimize risk.

INTRODUCTION

A mere 20 years ago, not many people would have been able to predict the sheer scale of technology's impact on the nature of work and the culture of the workplace. Nor would very many mainstream thinkers have forecast the rise of new economic powerhouses, such as China and Brazil. Many business leaders in the early 1990s would have found it difficult to believe that not only would India's GDP, within a couple of decades, be ranked in the top ten highest among global economies, but that more than half of its workforce would regularly telecommute instead of visiting a conventional place of work. But, as Peter Drucker, the eminent management theorist, once put it, "The only thing we know about the future is that it will be different."

What will the world of work look like 20 years from now? We may not be able to construct a completely accurate vision of the future, but we can certainly identify the emerging and consolidating trends that are likely to shape it. Our research indicates that technology will continue to play a pivotal role, supplanting many mid-skilled jobs, obviating the need for expensive offices and enabling cross-border teams to flourish. The profile of the average worker will also evolve—older, more likely to be female, more likely to hail from what is now the developing world, and less likely to enjoy a long-term contractual relationship with an employer.

Companies will need to update their practices accordingly. They must devote more effort to building partnerships with educational institutions and governments, with the aim of ensuring an adequate pipeline of the skills they claim are in worryingly short supply. New thinking on people management is another necessity. Many of the previously trusted techniques for managing culturally uniform, co-located teams, composed largely of male, long-service employees, are now as redundant as the office typewriter. This report will provide a comprehensive summary of the seismic developments already underway in the global workforce, and will be followed by a discussion of the challenges that these developments raise for human-capital management. We hope that it will be a valuable aid for human resource professionals as they reflect and plan for the future.

The changing nature of the worker

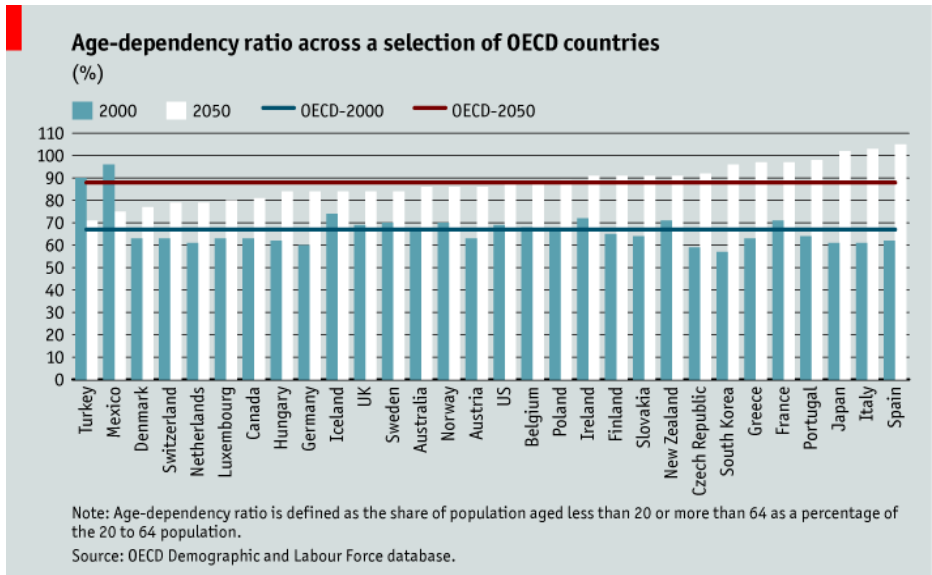
I. Demographic shifts will continue and intensify

The fundamental structural changes in the global population that have been witnessed in recent decades are set to continue and intensify, with profound implications for the composition of the international labor force and, as a consequence, for the human resource strategies of major employers.

Although the overall global population is predicted to increase by 5% in the period 2012–17 (from 6.48 billion to 6.80 billion³), a deeper analysis reveals a more nuanced picture. Whereas some countries and regions are experiencing a surge in the working-age population, others are witnessing a steady decline.

Generational shifts: Challenges and opportunities

An ageing population is very apparent throughout the developed world. Japan offers one particularly striking example. Its old-age dependency ratio—the ratio of those aged 65 and over to those aged 15-64—is set to grow from 38 percent in 2012 to 47 percent by 2017.⁴



China, typically viewed as a major growth economy, has not been immune to similar demographic challenges, although the effects will be felt more deeply in the future. The country's old-age dependency ratio is projected to increase almost fourfold, to 42 percent, by 2050, prompting an anxious government to further relax its infamous policy banning families from having more than one child.⁵

Several European countries, meanwhile, are responding to the continent's growing demographic deficit by raising the pensionable age, thereby aiming to keep older people in the workforce for longer. For example, the UK has scheduled an increase to the age of 67 for some time between 2026 and 2028, while, in Italy and Denmark, countries that now link pensionable age to life expectancy, that figure is expected to reach 69 by 2050.⁶ Despite these moves, however, much of the European workforce is still leaving the job market well before the official retirement age. In Austria, Belgium, France, Hungary, Luxembourg and the Slovak Republic, for example, men have, on average, finished work by their 60th birthday.⁷

³ Economist Intelligence Unit data.

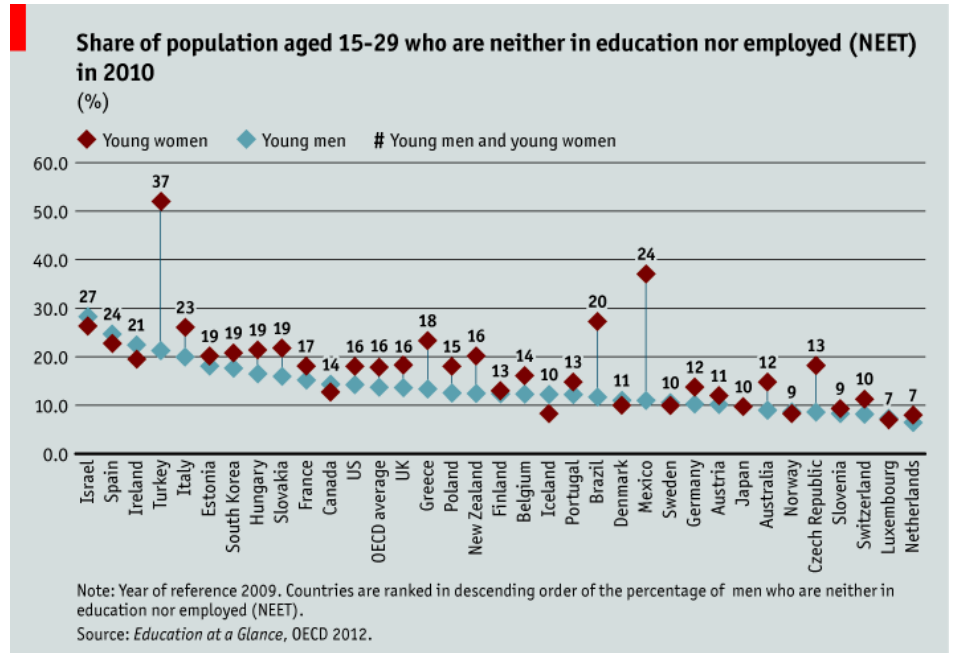
⁴ Economist Intelligence Unit data.

⁵ *The Economist*, "China's Achilles heel," Apr 21 2012. (<http://www.economist.com/node/21553056>).

⁶ OECD data.

⁷ OECD, Ageing and Employment Policies - Statistics on average effective age of retirement." (<http://www.oecd.org/els/emp/ageingandemploymentpolicies-statisticsonaverageeffectiveageofretirement.htm>).

Much of the emerging world is experiencing quite different demographic challenges, and is obliged to devise an appropriate education system to prepare an overwhelmingly young population for the demands of the future world of work. For example, more than half the population in the Middle East and North Africa region is under 25.⁸ The emphasis on education in the developing world partly explains the reduction in the number of young people in the global workforce since 2007, despite the growth in the youth population of more than 12 million.



In some countries within the EU, however, the explanation for a decline in youth participation is less benign. In Spain and Italy, for example, almost one-quarter of 15-to-29-year-olds were neither in education nor employment (NEET) in 2010,⁹ leading to concerns about a “lost generation,” and resulting in social strife. “The economically inactive are not necessarily politically inactive,” says Ekkehard Ernst, head of the Employment Trends Unit at the International Labour Organization. “They can form powerful constituencies that lobby for a reduction in inequality, or even a fundamental change in the system itself.”

Surprisingly, employers in those countries with the highest rate of youth employment have also reported the greatest difficulty in finding workers with the right attributes, particularly soft skills such as oral communication and work ethic.¹⁰ According to this study, conducted by the management consultancy, McKinsey & Company, educational institutions are displaying a detachment from reality, which hinders progress. In Europe, 74 percent of education providers were confident that their graduates were prepared for work, but only 38 percent of youth and 35 percent of employers agreed.

⁸ International Labor Organization, “Long term youth unemployment causes generation's distrust,” May 8 2013.

(http://www.ilo.org/brussels/press/press-releases/WCMS_212981/lang-en/index.htm).

⁹ OECD (2012), “Education at a glance 2012,” (http://www.oecd.org/edu/EAG%202012_e-book_EN_200912.pdf).

¹⁰ McKinsey, “Education to employment; Getting Europe's youth back to work”, 2013.

Global-workforce diversity

Along with shifting age patterns, recent decades have witnessed substantial movement of populations, both domestically and cross-border, leading to reduced cultural homogeneity within national workforces.

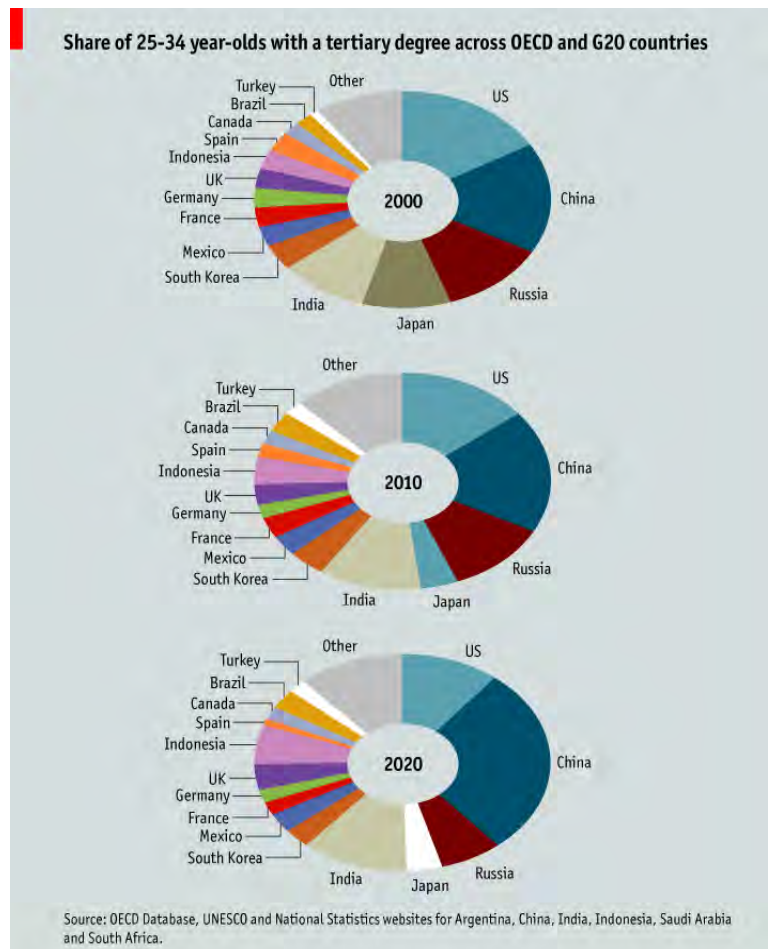
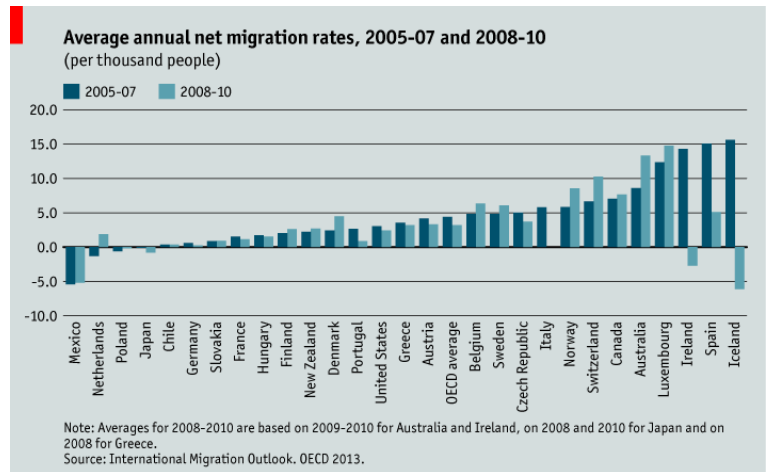
Urbanization has been growing in all parts of the world over the last 20 years, with the largest increase in the East Asia and Pacific region. In the space of just ten years from 2000, the percentage of the Chinese population living in cities increased from one-third to one-half.¹¹

Millions of people have also migrated to the more prosperous regions of the world. Annual foreign-population inflow into Germany reached 842,000 in 2011, and the number of permanent arrivals in the US topped 1 million every year from 2005 to 2011.¹² The US Department of Labor has predicted that net immigration will increase the country's population by more than 80 million in the first half of this century, accounting for two-thirds of its overall population increase.¹³

The pace of future migration is, however, threatened by the withholding of social-security benefits for foreign workers in certain countries. For example, EU countries remain free to determine, under their own laws, the details of the benefits to which workers from other EU countries are entitled.

The third billion: Women in the workforce

Ethnic and national diversity has been accompanied by an increase in the number of women entering the workforce in many countries. Booz & Company, the management consultancy, has concluded that 865 million women, the vast majority from the developing world, will enter the economic mainstream in the decade to 2020, with this number conceivably passing 1 billion in the subsequent decade.¹⁴



¹¹ Economist Intelligence Unit data.

¹² OECD data.

¹³ US Department of Labor, "The workforce."

(<http://www.dol.gov/dol/aboutdol/history/herman/reports/futurework/report/chapter1/main.htm>).

¹⁴ *Strategy + Business*, "The Third Billion", 2010. (<http://www.strategy-business.com/article/10211?gko=98895>).

The effect on economic performance is likely to be substantial in those countries where women are pouring into the workplace in vast numbers. Booz predicts that rising female-employment rates will result in a net GDP boost of 34 percent in Egypt and 27 percent in India by 2020. With global figures indicating that women now outnumber men in tertiary education (by a ratio of 108 to 100¹⁵), female participation in the workplace is likely to become increasingly highly skilled. Given that many women with young children will continue to work part-time, employers will have to become attuned to the idea that many highly qualified workers in key jobs will not always be available.

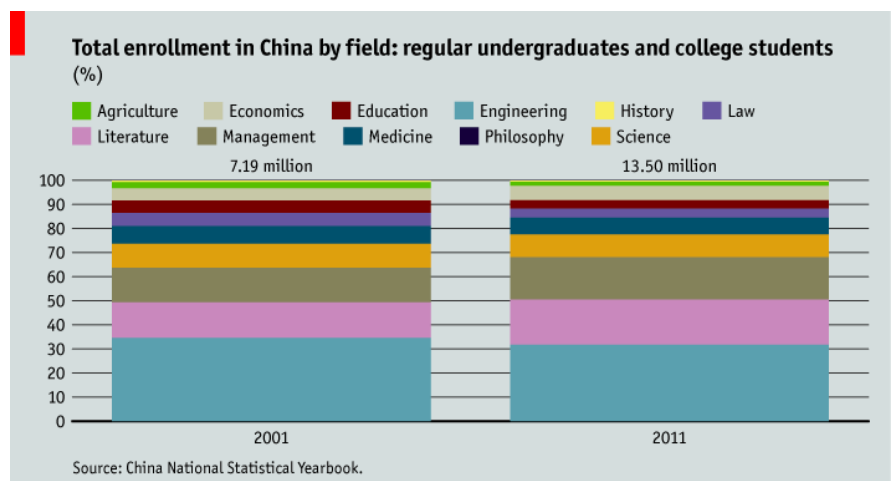
II. Education and skills outlook

The world as a whole is becoming more educated, a development spurred by governments seeking to bolster their country's competitiveness in a global knowledge economy that requires sophisticated, independent thinking from its workers.

The remarkable expansion of tertiary education in rapidly developing countries has reduced the proportion of college graduates from Europe, Japan and the US in the global workforce. In 2000, there were 51 million 25-to-34-year-olds with higher education (tertiary) degrees in OECD countries, and 39 million within non-OECD G20 countries, which comprise large emerging economies. By 2010, however, this gap had nearly closed, with the respective figures at 66 million and 64 million.

Should current trends continue, China and India alone will account for 40 percent of young people with a tertiary education in all G20 and OECD countries by the year 2020, while the US and EU countries combined will contribute just over one-quarter. Indeed, China aims by that time to have a graduate population (195 million people, or 20 percent of its citizens) roughly equal in size to the entire projected population of 25-to-64-year-olds in the US, demonstrating the sheer volume of the country's human potential in the coming decades.¹⁶

Quantity is not everything, however. As it struggles to adapt its vast education system to the complexities of the broader economic environment, China has sought to orient its supply of graduates to the most marketable and commercially useful disciplines. Around one-third of the degrees now awarded in China are for engineering, with management and foreign languages, particularly English, rapidly gaining in popularity.



Although the growth of STEM degrees (science, technology, engineering and mathematics) has been particularly marked in developing countries, more established nations have also devoted resources to this area for the same reasons. For example, between 1998 and 2011, the number of graduates in science-related fields increased by 48 percent in the US, 60 percent in Australia and 145 percent in Germany.¹⁷

To complicate future planning, however, higher enrollment rates in STEM subjects do not necessarily translate into better skills. For example, the quality of China's huge number of engineering degrees has been disputed in

¹⁵ World Bank data.

¹⁶ OECD "Education indicators in focus," May 2012. (<http://www.oecd.org/edu/50495363.pdf>).

¹⁷ OECD data.

some quarters.¹⁸ Regional variations are also cited. "There are clear differences within individual growth markets," says Jeff Cava, Executive Vice-President and Chief Human Resource Officer at Starwood Hotels. "Shanghai and Beijing are known for famous locally recognized universities with four of the top five most famous universities in China being in Beijing, whereas Shanghai is recognized for having more international cooperation. At Starwood we find the education system more international in Shanghai than elsewhere in China, for instance."

To illustrate further the haphazard nature of education standards, Japanese and Dutch 25-34-year-olds who have only completed high school easily outperform Italian or Spanish university graduates of the same age.¹⁹ If they are to recruit graduates with the full range of facts in front of them, major employers will clearly need to become experts in the nuances and complexities of global education.

Another obvious challenge for governments is to ensure that economic opportunities can meet the ambitions of graduates emerging from educational institutions. It has been estimated that 100,000 university graduates have left Spain, and hundreds of thousands more from Europe's other crisis-hit countries have gone to Germany, Britain, and the Nordic states for jobs in engineering, science and medicine. Many others have gone further afield, to Australia, Canada and the US.²⁰

Even in countries where unemployment is much lower, there is always the risk that there will be more graduates than jobs that can keep a restless graduate mind stimulated (see Workforce motivations), thereby raising questions about the level of investment in education. By 2009, 40 percent of the 25-34 age group in several European countries—Belgium, France, Ireland, Luxembourg, the Netherlands, Sweden, Switzerland, and the UK—had completed tertiary education.²¹ But a 2011 OECD study reported that in Sweden, for example, 35 percent of workers were overqualified for their current jobs.²²

Those countries rapidly developing their education system are especially susceptible to this danger. Although China and India lead this cohort, some emerging European countries, with a keen eye on future competitiveness, are quickly catching up with the educational attainment of their more developed counterparts. In Poland, 39 percent of 25-34-year-olds were graduates by 2011, after the country underwent a rapid growth in tertiary education in the first decade of the century. Between 2000 and 2011, the proportion of young adults with degrees grew by 9.7 percent a year, almost three times the OECD average growth rate of 3.5 percent.²³

¹⁸ See, for example, McKinsey, "Making talent a strategic priority," 2008, *McKinsey Quarterly*, No.1. (<http://www.managingpeoplebook.com/WarForTalentNeverEnded.pdf>).

¹⁹ OECD, "Skilled for life: Key findings from the survey of adult skills," 2013. (http://skills.oecd.org/SkillsOutlook_2013_KeyFindings.pdf).

²⁰ *The New York Times*, "Young and educated in Europe, but desperate for jobs," Nov 15 2013. (http://www.nytimes.com/2013/11/16/world/europe/youth-unemployment-in-europe.html?_r=0).

²¹ OECD, "Education indicators in focus."

²² OECD, "Underqualified or underskilled," 2011. (<http://www.oecd.org/els/48650026.pdf>).

²³ OECD, "Education at a glance: Poland," 2013. (http://www.oecd.org/edu/poland_EAG2013%20Country%20Note.pdf).

III. Workforce motivations

As the make-up of the labor force shifts, the culture of the workplace changes. Studies suggest that the new generation of workers—known as *millennials* or *Generation Y*—have very high expectations of their working life. They are considerably more focused than older generations on the immediate future than on the long term. They crave an exciting, varied and innovative environment, which offers them rapid career progression, and seek leaders who allow them the freedom to express their views openly. “Not enough compensation will demotivate a

person, but once they get above a certain point in perceived fair compensation, then worker motivation is far more related to non-cash rewards,” says Dr. Richard Vosburgh, Senior Vice-President and Chief Human Resource Officer at KEMET Electronics Corporation. “If employees are valued and their voices are heard, then they will be much more willing to provide their full commitment and stay in the firm.”

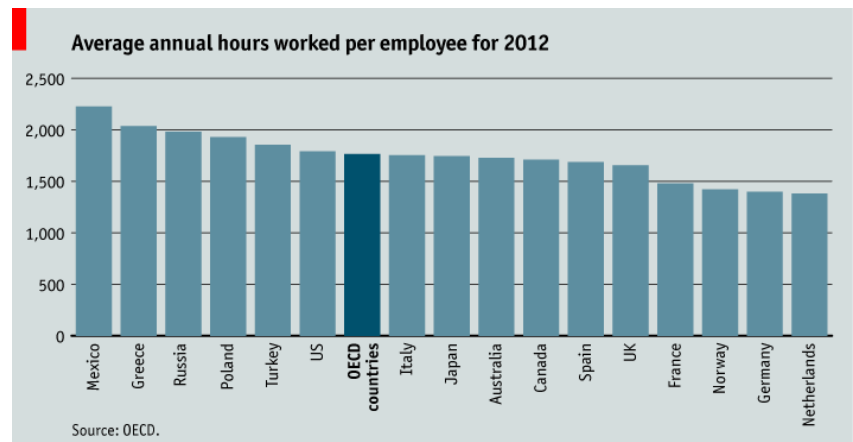
Unsurprisingly, many employers cannot live up to these exacting standards. Nearly six in ten employed millennials say they have switched careers at least once. Loyalty to individual organizations appears considerably lower among the younger generation today than in previous decades. According to a recent report by Georgetown University, the average millennial changes jobs 6.3 times between the ages of 18 and 25, compared with 5.5 times for a baby-boomer when he or she was between 18 and 25.²⁴

Rapid turnover hurts employers’ finances. Research suggests that direct-replacement costs can be as high as 60 percent of the departing employee’s annual salary²⁵ without taking into account less tangible drawbacks, such as loss of production, or reduced morale among those that remain.

Another priority of Generation Y is work/life balance.²⁶ Working hours throughout the developed world have been on a downward curve for more than a century. With large numbers of women entering the workforce, many of whom want to combine employment with domestic responsibilities, average working hours in many countries may be further reduced.

Political pressure may also result in a decline in working hours, albeit not uniformly across individual countries. In fact, in countries where employees have experienced decreased bargaining power and rising living costs, and where there is particular pressure on organizations to curb labor costs, many employees may work longer hours than in previous decades. Indeed, despite the trend in most of the developed world, average working hours vary enormously across countries. The average Mexican worker toiled for 2,226 hours in 2012, 61 percent greater than the 1,381 hours put in by the average Dutch worker. The average American worker in 2012 worked 1,790 hours, compared with 1,837 in 1975.²⁷

During recent years, the notion that workers have personal goals, and will work to achieve them, has been attracting much attention. This concept, sometimes referred to as “worker agency,” arises from a strengthened



²⁴ Georgetown University, “Failure to launch: Structural shifts and the lost generation”, The Generations Initiative, Sep 2013.

²⁵ D. Allen, Retaining talent: A guide to analyzing and managing employee turnover, SHRM, 2008.

(<http://www.shrm.org/about/foundation/research/Pages/RetainingTalentEPG.aspx>).

²⁶ PwC, “PwC’s NextGen: A global generation study,” 2013. (http://www.pwc.com/en_GX/gx/hr-management-services/pdf/pwc-nextgen-study-2013.pdf).

²⁷ OECD data.

sense of individuality among the younger generation, who see their professional ambitions less as a part of a collective enterprise and more as an end in themselves.

Initiatives such as *crowdfunding*, in which a group of individuals pool their resources to fund someone else's project or organization, have not only allowed some such workers to remain independent; they have also enabled entrepreneurs to materialize start-up companies, motion-picture promotion, free software development and other ventures that would have been impossible to accomplish before. Through more than 1 million individual companies globally, crowdfunding initiatives raised US\$2.66 billion in 2012 (US\$1.6 billion of which was raised in North America) and approximately US\$5 billion in 2013. Even within companies, engaging with employees at the individual level and supporting them in fulfilling personal ambitions are becoming more commonplace. From Google's practice of hiring by committee, to M.D. Anderson Cancer Center's mentoring programs, to Recreational Equipment Inc's (REI) use of social media to connect with employees, companies are increasingly trying to make their workforce feel special and valuable at the individual level, as well as encouraging them to be more innovative and creative.

Case study: Zensar Technologies' innovative collaboration initiative, "Vision Communities"

Zensar Technologies, a rapidly growing Indian IT-services company, seeks to exploit the yearning for personal impact for its commercial benefit. Its Vision Communities program enables selected people from throughout the organization to come up with new ideas on strategy and its implementation. Although the resulting innovation constitutes a substantial contribution to Zensar's growth in revenue, the advantages of the Vision Communities are not just confined to the balance sheet. "Allowing a firm's associates from all strata to participate in ideation and strategy building can always have benefits in terms of morale, as well as in the eventual implementation of ideas," says Ganesh Natarajan, the company's CEO.

The changing nature of work

IV. The evolving industry make-up

As incomes continue to rise in both developed and developing nations, popular expectations and demands for basic services, healthcare and education increase. As a result, we see service sectors growing quickly in countries previously dominated by either the agriculture or manufacturing sectors.

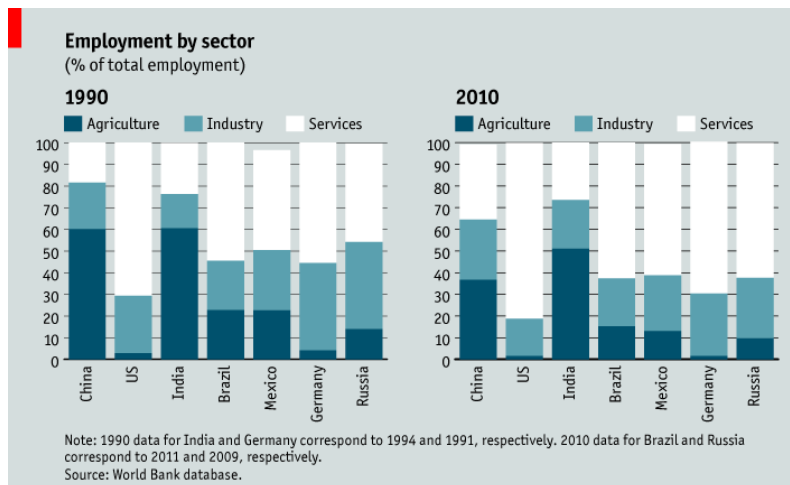
However, given that many jobs in the services sector cannot be automated, labor productivity grows more slowly in that sector than in other segments. The result is a disproportionately high demand for labor in the services sector, both those requiring high and low skills, and declining employment in the rest. With competition for workers producing higher labor costs, services become more expensive and consequently represent a larger share of GDP.

We can see this pattern developing throughout the world, as increasing prosperity alters the balance of the employment market. The make-up of China's economy has been transformed over the last two decades. Its output of services has now caught up with its industrial production. Across four quarters in 2012 and 2013, services and industry accounted for exactly the same amount of China's GDP (45 percent each).²⁸

As wages increase in the services sector, the country's employment is shifting away from agriculture. The agricultural share of employment declined from 60 percent in 1990, to 37 percent in 2010. The proportion of jobs contributed by the services sector has almost caught up, increasing from 19 percent to 35 percent during this 20-year period.²⁹

Their respective shares of GDP have followed a similar trajectory. In 1990, the proportion of GDP attributed to agriculture in China was 27 percent, declining to 10 percent by 2010. The share for services, in contrast, increased from 32 percent to 43 percent in this period. We also clearly see from these figures the disproportionately high share of GDP for services in relation to its proportion of employment, and the reverse pattern for agriculture.

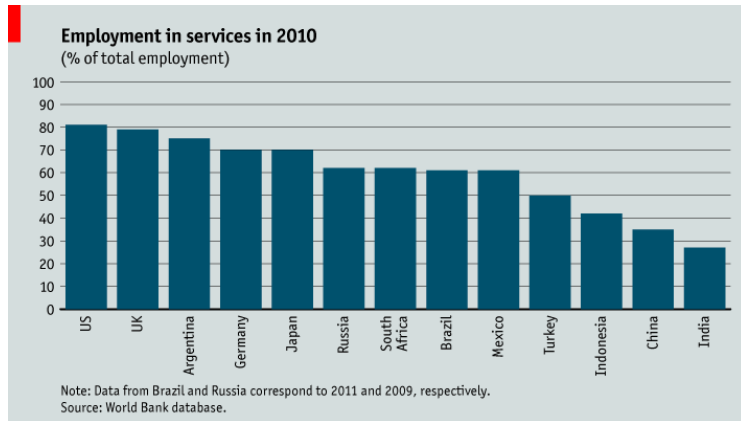
Other developing economies also expanded their services sector significantly. Between 2000 and 2009, notable increases in the services sector's share of employment were seen in Turkey (with the highest increase in the first decade of the century: 12 percent), Philippines, Romania, Poland, and Mexico.³⁰



²⁸ *The Economist*, "Industrial eclipse," Apr 15 2013. (<http://www.economist.com/blogs/analects/2013/04/economic-rebalancing>).

²⁹ World Bank data.

³⁰ World Bank data.



In developed economies, the service sector's share of employment has also been on an upward curve, although moving more gradually from a higher base. The US, the UK, Russia, Spain, Germany, France, and Japan all experienced an increase of more than 5 percent in the service sector's share of employment between 2000 and 2009. To give some idea of the gulf that still exists between developing and developed countries, the total percentage shares for services-sector employment in the US and Turkey were 81 percent and 52 percent, respectively, in 2009.³¹

Improved living standards, and economic dynamics that have in the main kept the services sector free from automation, have propelled its growth in more advanced economies, while many jobs in the manufacturing sector have been automated or diverted offshore to regions with lower labor costs.

As a consequence of these factors, employment in the manufacturing industry contracted sharply in most OECD countries between 2002 and 2012. Greece recorded the highest rate of decline (38 percent), followed by the UK, Ireland, Netherlands, Spain, Portugal, Canada, and the Scandinavian countries.³² China has been the primary beneficiary of offshoring, but increasing labor costs may threaten its pre-eminent position (see section VI).

V. Technology's evolving role in redefining work and workforce demand

The rapid growth of technology is opening up new frontiers and undermining old ways of working. It has created new jobs, while eliminating others. It has enabled previously isolated countries to participate in global business, and allowed work to be more easily distributed and performed far from its original source. An increasing number of jobs that rely on human interaction are likely to be conducted virtually, either because the individual worker volunteers to work in that way, or because the employer makes telework compulsory to save on the costs of premises.

Global technology use and penetration

Individuals now have widespread access to technology that immediately connects them to the outside world, an unprecedented situation in human history.

Worldwide penetration of personal computers, just 10 per hundred people at the turn of the century, was estimated to be 39 per 100 people in 2013, and is projected to grow to around 52 per 100 people in 2017. However, regional disparities persist. The penetration rate is 126 PCs per 100 people in North America in 2013, 25 PCs per 100 people in Asia and Australasia, and only 10 PCs per 100 people in Sub-Saharan Africa.³³

Fixed broadband subscriptions are characterized by similar variations. In Western Europe, the subscription rate stood at 33 per hundred people in 2013 (*not* households—several people may share one subscription), compared to 12 per hundred in Latin America and seven per hundred in the Middle East and North Africa region.

³¹ World Bank data.

³² OECD data.

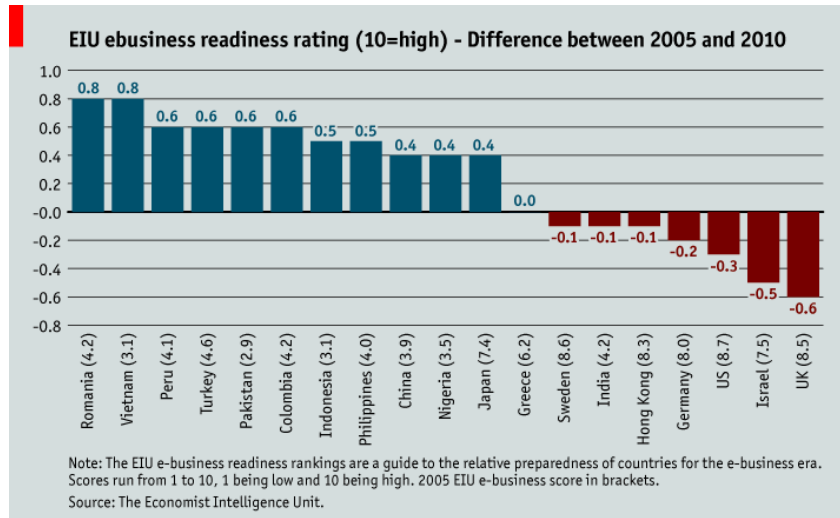
³³ Economist Intelligence Unit data.

Although this gulf in PC ownership and broadband subscription rates is predicted to persist, there has been a huge rise in mobile-phone usage in the developing world, allowing many to connect to the Internet in this way.

Mobile-cellular subscriptions per 100 people are now higher in countries such as Vietnam, Brazil, Jordan and Saudi Arabia than in North America.³⁴ Mobile-broadband subscription rates, growing worldwide at a rate of 30 percent a year, are considerably higher than for fixed-broadband subscriptions in a host of countries. In Ghana, for example, the 2012 rates were 33 per hundred people for mobile, and 0.3 per hundred for broadband; in Namibia, the corresponding rates were 29 and 3; in Bahrain, 67 and 13.³⁵

By the end of 2013, the International Communications Union had predicted there will be 2.1 billion mobile broadband subscriptions, equivalent to one-third of the total global stock of mobile cellular subscriptions (up from one-fifth in 2011).³⁶

With deeper technology penetration, developing economies have become better prepared for the electronic-business era, according to The Economist Intelligence Unit's ebusiness readiness rankings from 2010. For example, the ebusiness readiness of Romania, Peru, Colombia, China, Vietnam, Nigeria, Pakistan, and Indonesia grew at a compound annual growth rate of at least 2 percent in the period between 2005 and 2010, thereby rising in the rankings at the expense of more developed countries.



The evolving role of technology has had a direct impact on job creation and economic development, particularly in the developing world. According to an International Finance Corporation (IFC) jobs study from 2013, firms in developing countries investing in Information and Communications Technology (ICT) achieved both higher labor productivity and job growth. In fact, the World Bank estimates that advances in the telecommunications sector have contributed significantly to Africa's GDP-per-capita growth, more so than investments in roads or power.

The benefits of technology investment are not only being felt across emerging markets. According to the same IFC report, the US-based Information Technology and Innovation Foundation estimates that an investment of US\$10 billion in the US broadband network could create more than 60,000 jobs directly, about 165,000 indirectly and induced jobs and almost 270,000 growth-related jobs.

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Technology's continued evolution will have a direct impact on future employment opportunities, particularly for youth and women. The IFC predicts that the IT industry will create around 4 million additional jobs directly by 2016, while indirectly creating as many as 12-16 million more in other sectors. In India already around 70 percent of IT-sector jobs are held by younger workers (aged 26-35), while, in the Philippines, 60 percent of the IT-based services workforce are women.

³⁴ World Bank data.

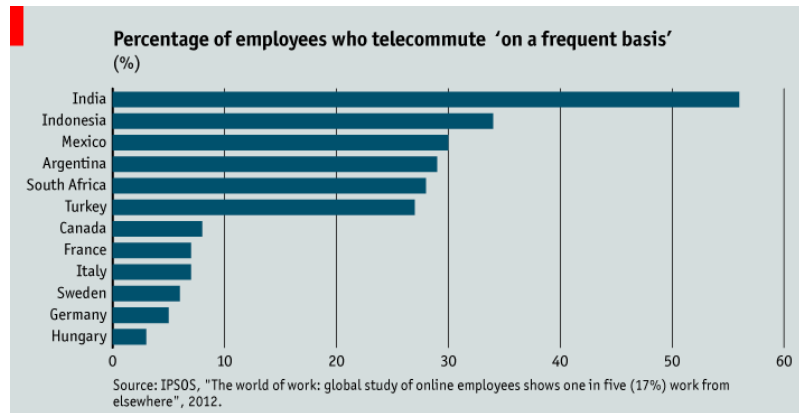
³⁵ The Broadband Commission for Digital Development. "The state of broadband 2013: Universalizing broadband," 2013. (<http://www.broadbandcommission.org/Documents/bb-annualreport2013.pdf>), pp. 91-94.

³⁶ The Broadband Commission for Digital Development. "The state of broadband 2013," p. 12.

Eroding physical barriers in the workplace

Technology has made it possible for employees to work from a place of their own choosing, and has rendered their physical presence in one company office building less important. However, statistics demonstrating the practical consequences of the increased availability of technology for the nature of global working habits have been limited and sometimes inconsistent. What does seem clear is that teleworking, or telecommuting—the use of home computers, telephones and other technology to enable a

person to work from home while maintaining contact with colleagues, customers, or a central office—varies according to a number of factors, such as size of company, geography and class.



The latest comprehensive figures from Europe (released in 2006—a long time ago in a fast-changing scene) indicate, for instance, that teleworking is more common in larger companies, where more resources are likely to have been devoted to technology. In organizations with more than 250 employees, 64 percent performed part of their work remotely by accessing their company's enterprise IT system, while the figure was just 22 percent among the smallest companies.

A 2011 Deloitte study, however, reported that, while larger companies in the US are more likely to permit telework, employees in smaller companies were prone to adopt remote-working practices on a more frequent basis.³⁷ Meanwhile, US Census Bureau research from 2010 reveals that almost half (45 percent) of those who work only at home are self-employed.³⁸

There is some evidence that workers in the developing world are more likely to take advantage of the opportunities afforded by technology, possibly due to the relative lack of an office-building infrastructure. A 2012 Ipsos survey of employees who could connect virtually to their workplace found that those working in the Middle East and Africa (27 percent), Latin America (25 percent) and Asia-Pacific (24 percent) are considerably more likely than those in North America (9 percent) and Europe (9 percent) to telecommute "on a frequent basis."³⁹ The country with the highest proportion of teleworkers was India, at 56 percent.

The same survey also revealed that respondents with a high level of education are more likely to telecommute, a finding corroborated by the US Census Bureau research, which discovered that those with a bachelor's degree and with the highest earnings worked from home most often.

The Ipsos survey also revealed that a comfortable majority of workers believe that there is a strong correlation between teleworking and productivity. Almost two-thirds (65 percent) think that telecommuters are more productive because the flexibility allows them to work when they have the most focus, and/or because having maximum control over the work environment and schedule leads to job satisfaction and happiness.

³⁷ Deloitte, "Next generation telework: A literature review," 2011.

(http://www.melbourneinstitute.com/downloads/hilda/Bibliography/Other_Publications/Next_Generation_Telework-A_Literature_Review-July_2011.pdf).

³⁸ *Household Economic Studies*, "Home-based workers in the United States: 2010," Oct 2012.

(<http://www.census.gov/prod/2012pubs/p70-132.pdf>).

³⁹ Ipsos, "The world of work: Global study of online employees shows one in five (17%) works from elsewhere," Jan 2012.

(<http://www.ipsos-na.com/news-polls/pressrelease.aspx?id=5486>).

An array of statistics purports to support this thesis. For example, a 2013 Stanford University study of a large Chinese travel company found that the output of call-center staff rose by 13 percent after volunteering to work from home. After this experiment, the company offered all employees the option to work remotely, and more than half accepted.⁴⁰

Indeed, there is clearly a widespread appetite among workers to reduce the drudgery of commuting and work in a more convenient location. Globally, more than one-third (34 percent) of connected employees in the Ipsos survey agree they would be “very likely” to take the option to telecommute on a full-time basis from their home or other location if their employer offered them the opportunity. There are many potential benefits for employers, not only from increased productivity and lower property costs, but also from reduced absenteeism and turnover rates among workers.

The growing phenomenon of *crowdsourcing*—enlisting the sporadic services of a large number of people, either paid or unpaid, typically via the Internet—derives its potential from the massed ranks of workers with the ability to work wherever they want (see case study, below). The total revenue for the crowdsourcing industry is estimated to have grown by 75 percent, to US\$376 million, between 2010 and 2011.⁴¹

Case study: The human cloud

Crowdsourcing workers possess a wide range of skills and expertise, taking advantage of technology to perform a variety of tasks. The sectors making most use of crowdsourcing were Internet services (29 percent of the overall crowdsourcing industry), media and entertainment (20 percent) and technology (18 percent). Start-up and small companies were responsible for more than 60 percent of the total revenue in the industry, a contribution only set to increase as the entrepreneurship model expands further in developing markets.

The website crowdsourcing.org divides crowdsourcing into five categories: *ideation*, or *innovation*; *expertise-based tasks*; *micro-tasks*, or small tasks for a low amount of money; *freelance work*; and *software services*. Expertise- and software-based services usually require more sophisticated skills and are paid drastically higher than micro-tasks.

The total number of crowdsourcing workers doubled in 2011, to 6.3 million from 2010, with the majority highly educated and living in North America or Asia Pacific. Overall, 59% of crowdsourcing workers are male. However, at the category level, the composition shifts dramatically. While women provide 50% of ideation and 55% of micro-tasks, men complete 63% of expertise-based work and 70% of software services.

Innovation is forecast in three areas. These will involve further *task decomposition*, segmenting full-length projects into yet smaller tasks; the expansion of real-time crowdsourcing, where workers are paid retainer fees to remain on call; and the development of social-governance techniques, which allow top-performing workers to manage and approve others' work.⁴²

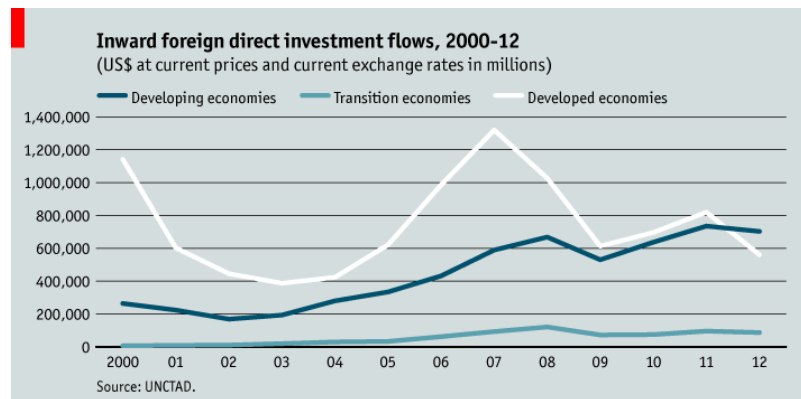
⁴⁰ Stanford University, “Does working from home work? Evidence from a Chinese experiment,” Feb 2013. (<http://www.stanford.edu/~nbloom/WFH.pdf>).

⁴¹ Massolution, “The crowd in the cloud: exploring the future of outsourcing,” Jan 2013. (http://www.lionbridge.com/files/2012/11/Lionbridge-White-Paper_The-Crowd-in-the-Cloud-final.pdf).

⁴² MIT, “Managing the human cloud,” *Sloan Management Review*, 2013. (<http://sloanreview.mit.edu/article/managing-the-human-cloud/>).

VI. The global multinational as the new normal

As companies seek to grow their businesses, broaden the range of able potential employees available to them, and lower costs of production, they are expanding operations and sales at global level. Both human-capital and raw-material resources are being sourced from multiple countries. Global companies (which manufacture a product in one country, but have an administrative office in a second country, and sales operations in a third) are becoming more commonplace.



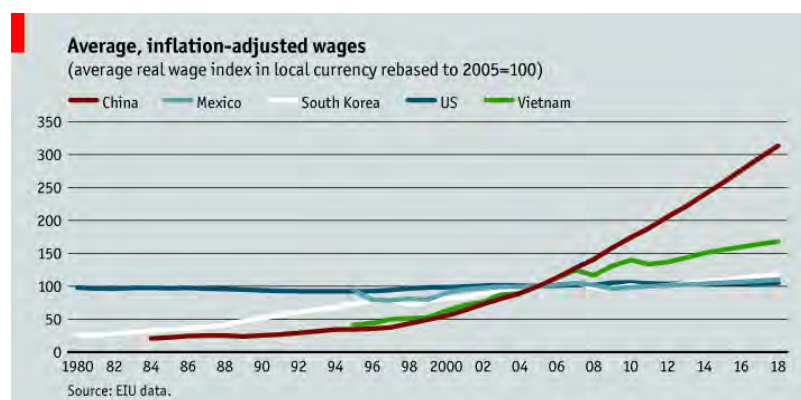
Operating and selling globally

Recent trends include the expansion of available human resources, especially in the services and knowledge sectors, through acquiring foreign enterprises or through offshoring. Some commentators predict companies to devote increasing investment to other regions of the world (such as Eastern Europe and the Middle East) as cost savings decline in China and India, and as other factors are seen to become more relevant, such as geographic proximity to central operations, or cultural and language barriers.

Foreign direct investment (FDI) is increasingly flowing from the developed world toward developing countries. In the first half of 2013, FDI to developing and transition economies was 60 percent of overall global flows, a record share.⁴³

Cross-border mergers and acquisitions, and large retained earnings kept in foreign affiliates, have been the driving forces behind current global FDI growth, rather than investment in new productive assets through greenfield-investment projects. While global FDI inflows grew at 4 percent year on year from the first half of 2012, to US\$745 billion, cross-border mergers and acquisitions grew by 84 percent, to US\$180 billion, and greenfield investments declined by 4 percent, to US\$298 billion.

The international ambition of a given company depends to a large degree on where it is based, and on its size. Listed companies in smaller developed economies, such as in the UK and France, have a greater need to expand beyond their limited domestic market than do their counterparts in the US, for example.



While large companies are more likely to have the resources and scale to expand globally, small and medium-sized enterprises (SMEs) have traditionally required significant up-front investment to scale and export. However, the advent of Internet trade may dramatically change this situation, unlocking the international potential of small business, should various trade barriers be eased.⁴⁴

⁴³ UNCTAD data.

Looking for new regions of development

The steep increase in wages in China, slashing its labor-cost advantage, is making it a less obvious destination for the outsourcing of production. Average inflation-adjusted wages will have risen by 5 percent in the US between 2005 and 2018; however, in China, they will have risen by a forecast 213 percent.

There is some debate about where manufacturing jobs will reside in the future. A Boston Consulting Group study suggests that the increasing labor costs in China will prompt companies in the US to move manufacturing operations to countries such as Vietnam, Indonesia or Mexico, or even back home.⁴⁵ Meanwhile, the Deloitte 2013 *Global Manufacturing Competitiveness Index*, based on a survey of several hundred CEOs on the various factors that affect a country's competitiveness, concluded that India and Brazil will further consolidate their already strong position over the next five years, with relatively new players, such as Vietnam and Indonesia, greatly improving their competitive ranking.⁴⁶



Central and Eastern Europe has also become more attractive as an outsourcing destination, particularly for highly skilled work, such as research and development (R&D), or information technology (IT). Education levels are high, with 29 percent of the 25–34 age group having tertiary degrees. Despite a comparatively sophisticated workforce, hourly wages are on average 75 percent lower than in the EU15 countries (and as much as 90 percent lower in Bulgaria and Romania).⁴⁷ It can also boast less corruption than the BRIC countries, relatively low corporate-tax rates, and, for companies based in Western Europe, a more attractive geographic location and fewer cultural and language barriers.

⁴⁴ See World Economic Forum, "Enabling trade, valuing growth opportunities," 2013.

(http://www3.weforum.org/docs/WEF_SCT_EnablingTrade_Report_2013.pdf).

⁴⁵ Boston Consulting Group, "Made in America, again," 2011. (<http://www.bcg.com/documents/file84471.pdf>).

⁴⁶ Deloitte, *Global Manufacturing Competitiveness Index*, 2013.

(http://www.deloitte.com/view/en_GB/uk/industries/manufacturing/70276aa44381b310VgnVCM1000003156f70aRCRD.htm).

⁴⁷ McKinsey Global Institute, "A new dawn: Reigniting growth in Central and Eastern Europe."

(http://www.mckinsey.com/insights/economic_studies/a_new_dawn_reigniting_growth_in_central_and_eastern_europe).

At the crossroads: Conflicting expectations of workers and the workplace

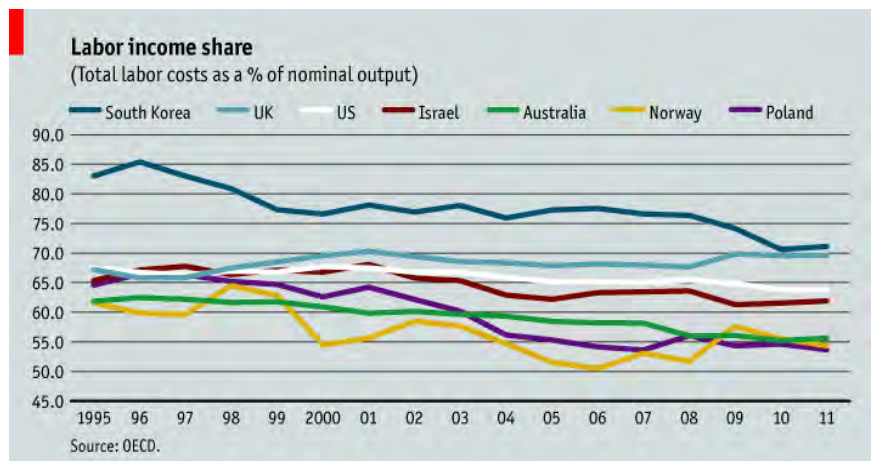
VII. Pressure to lower costs and meet the bottom line:

Wages should, in theory, remain in line with productivity. Over the past few decades, however, growth in wages has lagged behind gains in worker productivity. This is true not only for countries where wages have stagnated, but also in several countries where real wages have grown, such as Germany.

While large increases in productivity have led to rapid economic growth, the share of income that flows back to the workers has diminished. Given this recent evidence, economists today are re-evaluating past theories, which held that, while economies prospered, the total income of workers would grow at the same rate as that of capital owners.

Why has labor's share fallen? Technological change and globalization hold some responsibility for the increased pressure on labor costs. Technological advances allow higher returns with fewer workers, albeit generally more highly skilled ones. Moreover, companies find themselves in a strong negotiating position vis-à-vis those workers. As companies continue to become more global, capital becomes more mobile than labor, allowing companies to look for cheaper labor elsewhere.

More recently, studies have identified *financialization* as another cause of workers' woes. The contemporary focus on maximizing short-term shareholder value has led to pressure for higher profits.⁴⁸ In addition, the collective bargaining power of labor has decreased substantially, chiefly due to the deregulation of labor laws and decreased participation of workers



⁴⁸ Lazonick, W and O'Sullivan, M. 2000. "Maximizing shareholder value: A new ideology for corporate governance," in *Economy and Society*, Vol. 29, No. 1, pp. 13–35.

in unions, together with a decline in protectionist mechanisms, such as minimum wages and unemployment benefits.

Indeed, the effect of technology and globalization on labor costs may well have been overstated at the expense of other causes. In its 2013 *Global Wage Report*, the International Labour Organization (ILO) sought to disentangle the contribution of various factors in the fall in workers' share of the profits, and concluded that technology and globalization are not the main causes, contributing only 10% and 19%, respectively, to the decline in labor costs. However, it attributed about half (46%) to global financialization, and 25% to the effect of labor-market institutions, which include factors such as union participation, legislation, and unemployment benefits.

The pressure to lower wages is forecast to continue. When wages stagnate, economic growth may be affected by a fall in household purchasing parity and consumption. In addition, lower wage expectations may ultimately lead to lower investment in human capital—in other words, a reduced emphasis on education by individuals.

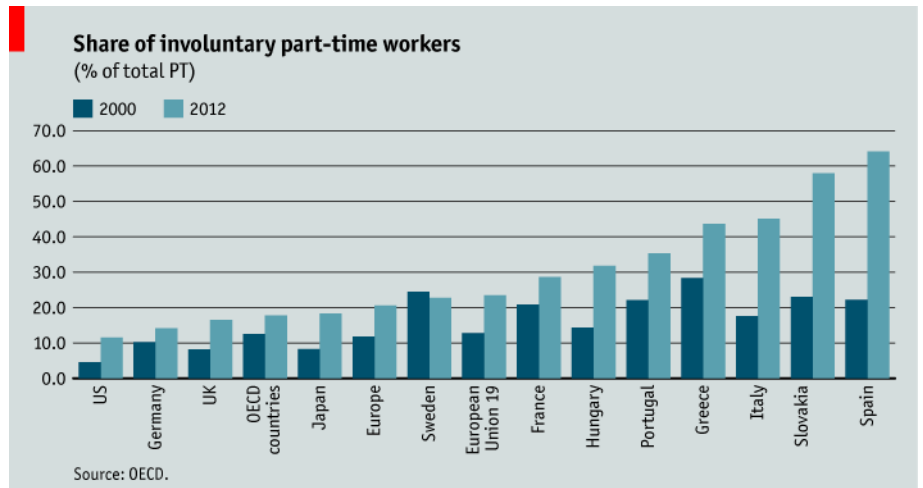
Adjustments in the labor market and economy are resulting in some unexpected consequences in family dynamics. In the US, stagnant wages and the housing crisis have altered the composition of the average American household. It is no longer uncommon for grandparents to join the nuclear-family household. In the last ten years, the number of homes that have three or more generations living together jumped 30%, to 4.4 million, and the trend is expected to continue.

At the other end of the spectrum, 36% of young adults aged 18 to 31 are currently living with their parents, which represents the highest proportion in at least four decades. The US example, however, differs from trends seen in other parts of the world. In India, for example, large-scale migration into urban areas and the adoption of Western lifestyles in the past few decades have eroded traditional intergenerational households. Approximately 30% of urban families in India live in intergenerational households, while that proportion has doubled in rural areas.

With the rise of dual-career families due to increased female participation in the labor force, intergenerational households do ease the costs of childcare and domestic work. Dual-career households constituted the majority (58%) of households in the US in 2011.

Temporary employment—the new normal

As firms look to lower labor costs, labor-market adjustments could take different forms. In the US, where labor-market laws are favorable to the employer, companies adjust by firing employees and thereby contributing to higher unemployment. In developing economies, the informal market may grow. In many developed markets, the prevalence of temporary workers and contractors increases. While a flexible workforce may help address



fluctuations in demand, many workers experience decreased job security, in addition to reduced benefits and investment in training. Temporary workers are often used as buffers, especially during economic downturns, to moderate their impact. In Germany, policies promoting short-term work helped to keep unemployment levels very low during the financial crisis of 2007-08. At the end of 2009, unemployment was at its second-lowest level

since 1994⁴⁹. As the economy began to pick up, the number of short-term workers decreased substantially, but overall unemployment rates did not increase noticeably. This suggests that, while short-term employment was most vulnerable, many temporary workers managed to return to more permanent employment.

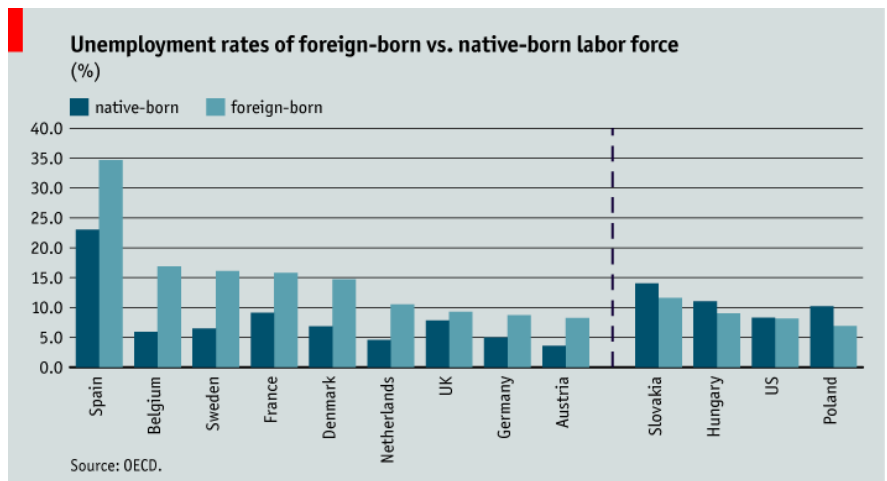
However, this is less true in some other countries. Japan houses one of the largest temporary and part-time workforces, a substantial 36.4% of its entire workforce in June 2013.⁵⁰ The number of part-time workers in the US, which reached a peak during the financial crisis at 20%, still remains near that level.⁵¹ While involuntary part-time employment has a cyclical component, its persistence is atypical according to the Federal Reserve Bank of San Francisco. Similarly, in the EU, the percentage of part-time employees who would rather work full-time increased from around 18% in 2003 to 28% in 2012. Meanwhile, the percentage of involuntary temporary (as opposed to part-time) employees in the EU increased from 53% in 2003 to 61% in 2012.

Temporary-employment models, therefore, appear to be a permanent fixture. However, little is still known about whether the workplace behaviors of temporary and part-time workers differ from their permanent and full-time counterparts, and what are the best practices of engagement with these alternative employees.

Recent technological advances have made it possible for companies to go beyond the hiring of temporary workers to fill job roles. Now they can also have work performed by a vast network of anonymous workers. Many experts fear that this phenomenon, crowdsourcing, facilitated by Internet platforms, leads to the “commodification” of some types of job. As a consequence, tasks like translations of short documents are being assigned to the lowest bidder on the Internet, which in turn translates into fewer stable job relationships for tasks that can be performed remotely, as well as a labor-cost race to the bottom. In the US, users of Amazon’s Mechanical Turk, one of the biggest crowdsourcing marketplaces, earned an average of US\$2.30 per hour in 2009, while Indian-based users made US\$1.58 per hour in the same year, incomes below the minimum wage for both countries.

VIII. Global migration and the next great war for talent

Migration, both international and internal (rural to urban), has a significant impact on the size and composition of labor pools. Common reasons for migration include the desire for improved living conditions and welfare systems, better employment opportunities, and, in some cases, political and social refuge. Whatever the cause, countries often enforce migration laws to control the flow of migrants—particularly inwards.



As global immigration regulations continue to fluctuate, these laws will remain key determinants of the supply of labor and the nature of available workers. Employers in the US, for instance often face immigration obstacles in hiring highly skilled workers. However, once these workers become available, they tend to be employed at higher rates than their American-born counterparts. In certain Central and Eastern European nations, like Poland, Slovakia, and Hungary, foreign workers also have lower unemployment rates than the native-born workers. In contrast, many Western European

⁴⁹ IZA Compact, “Shaping the future of labor”, Jul/Aug 2010.

⁵⁰ Staffing Industry, “Japan—temporary and part-time workers reach record high,” Jul 2013.

⁵¹ The Federal Reserve Bank of San Francisco, “What’s behind the increase in part-time work?” Aug 2013.

countries, which in the past had looser migration laws and offered comparatively attractive unemployment benefits, have higher unemployment rates among their foreign-born workers than among the native workers.

In countries that experience labor-skill shortages, governments ease migration laws to bridge the gap between labor demand and supply, and to develop their respective economies. For example, foreign nationals in Gulf countries form most of the private-sector workforce. In Saudi Arabia, a shortage of necessary skills and a disproportionately large public sector have historically prevented the private sector from hiring many locals. According to the Saudi Arabian Monetary Agency, expats composed around 87% of the private-sector workforce and 78% of the total workforce in 2012. In the past decade, Singapore has relied on liberal immigration laws to attract talent. According to *The Wall Street Journal*,⁵² the South-East Asian city-state boosted its population by nearly 32%, to 5.3 million, in the period from 2000 to 2012—through relying on foreign workers.

However, recent internal opposition to foreign laborers has led to the tightening of migration laws in both Saudi Arabia and Singapore. With over 200,000 Saudi graduates expected to enter the workforce every year by 2018,⁵³ authorities have begun imposing stricter laws. The Saudi labor minister announced in January 2014 that the minimum wage for Saudi nationals working in the private sector will be raised. Other measures have been taken to monitor migrant flow. In November 2013, thousands of workers were arrested as authorities started to crack down on illegal foreign workers around the nation. Meanwhile, in Singapore, citizens have been blaming the reliance on foreign workers for soaring living costs and lower wages. The Singaporean government responded in February 2013 to increased pressure by announcing levy increases when hiring foreign workers. The first increases are set to be implemented in July 2014, with additional increases expected in 2015. The government is also enforcing lower ratios of overseas workers to citizens.

Many economies fear that mass migration will depress labor-market conditions further, contributing to higher rates of unemployment, lower wages, and pressure on the welfare system. To prevent mass migration of labor from Bulgarian and Romanian nationals, nine EU member states, including the UK and Germany, had imposed stringent emigration and employment restrictions. In January 2014, these restrictions expired amid strong public opposition and continuous debate, especially in the UK. While Romania's labor minister, Mariana Campeanu, told the *The Times*⁵⁴ that new migrants were likely to boost the UK's GDP, the Prime Minister, David Cameron, toughened welfare rules for EU migrants in response to growing internal opposition. Some economists estimate that the cohort of young people likely to emigrate could soon be exhausted. Bulgaria and Romania have ageing and declining populations, with some of the lowest fertility rates in Europe. Furthermore, the economic downturn and cultural and language barriers may make migration to Western Europe seemingly less attractive.

Case study: Removing the *Hukou* system

China's *Hukou* (residency permit) system has been a feature of its command economy since the 1950s. It involves a family-registration system that controls the movement of people from rural to urban areas. In so doing, the authorities sought to limit excessively rapid urbanization, and thereby avoid undue financial and organizational strain on public services within cities. Despite these regulations, the system has in reality broken down due to the ever-growing need for cheap labor in urban areas. City authorities, therefore, do not want to enforce the residency criteria, but neither do they want to grant urban permits to so many migrants. The result is that many workers are unable to access public services such as healthcare, and their children are left uneducated, denied entry to urban schools. In 2012, the number of migrant workers in the cities was estimated to have exceeded 260 million, the equivalent of around one-third of the total urban population.⁵⁵

Although some restrictions in certain regions have been eased, only comprehensive reform would provide improved economic opportunities for migrants and reduce unfair segregation. The Development Research Center,

⁵² *The Wall Street Journal*, "Singapore tightens curbs on foreign labor," Feb 25 2013.

⁵³ Economist Intelligence Unit forecast.

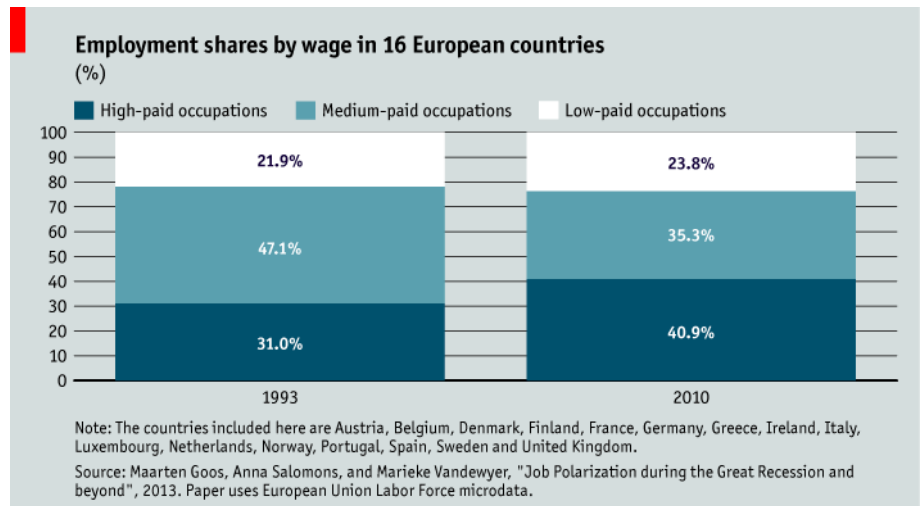
⁵⁴ *The Times*, "Idle Britons are allowing Romanians to take jobs," Dec 4 2013.

⁵⁵ A. Melander and K. Pelikanova, "Reform of the Hukou system: a litmus test of the new leadership," European Commission, Jul 2012. (http://ec.europa.eu/economy_finance/publications/economic_briefs/2013/pdf/eb26_en.pdf).

a Chinese government think tank, estimated in 2010 that turning 500 million rural workers into urban citizens over the next 20 years, providing them with urban benefits and welfare, would cost the equivalent of 5 percent of GDP at 2010 prices.

In order to encourage sector-specific growth or to bridge a skills gap, laws often restrict the type of foreign workers allowed. The United States issues a yearly quota of 65,000 H-1B non-immigrant visas to employ foreigners temporarily in “specialty occupations.” The visas are strictly limited to applicants with at least the equivalent of a bachelor’s degree, while the regulations also allow a certain number of additional applicants with advanced degrees to be exempt from the quota. This has allowed many employers to fill high-skilled positions. The US Office of Foreign Labor reports that 71% of H1-B occupations for FY2013 were in technology.

In spite of this, technology companies in the country have been lobbying for the reform of immigration and foreign employment laws as they continue to struggle to find high-skilled workers. *The Seattle Times* reports that Microsoft has offered to pay a bounty to the government in exchange for additional H1-B visas to fill thousands of existing vacancies.⁵⁶ According to *The New York Times*, the resources that technology companies have devoted to lobbying have increased dramatically, with Facebook’s budget rising from US\$350,000 in 2010 to US\$2.45 million in the first three months of 2013, and Google’s reaching a record US\$18 million in 2012.



As organizations become increasingly global, and geographical barriers come down, increased worker mobility helps to enable labor supply to meet demand. As more countries depend on the private sector, employers are expected not only to be beneficiaries of this trend, but also to take on a more significant role in influencing migration laws.

⁵⁶ *The Seattle Times*, “Microsoft push for worker visas raises concerns, exposes loopholes,” Nov 24 2012.

IX. Where did the middle-skilled jobs go?

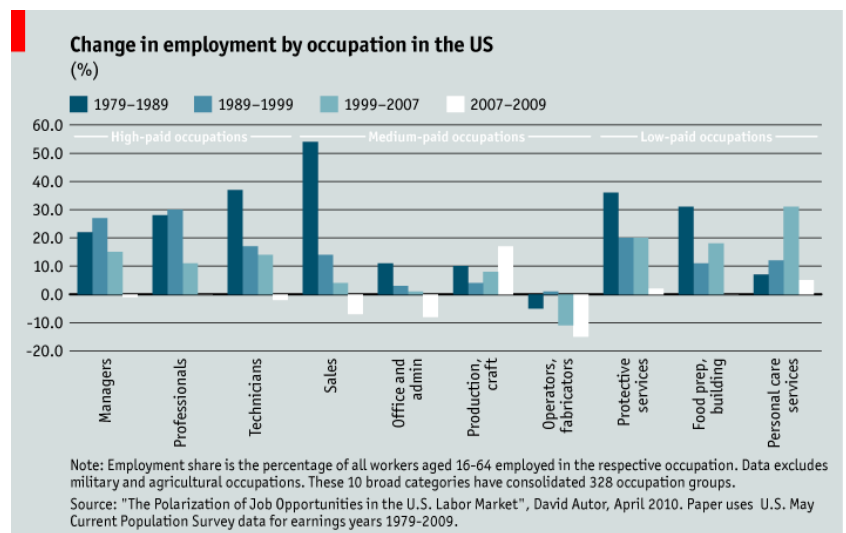
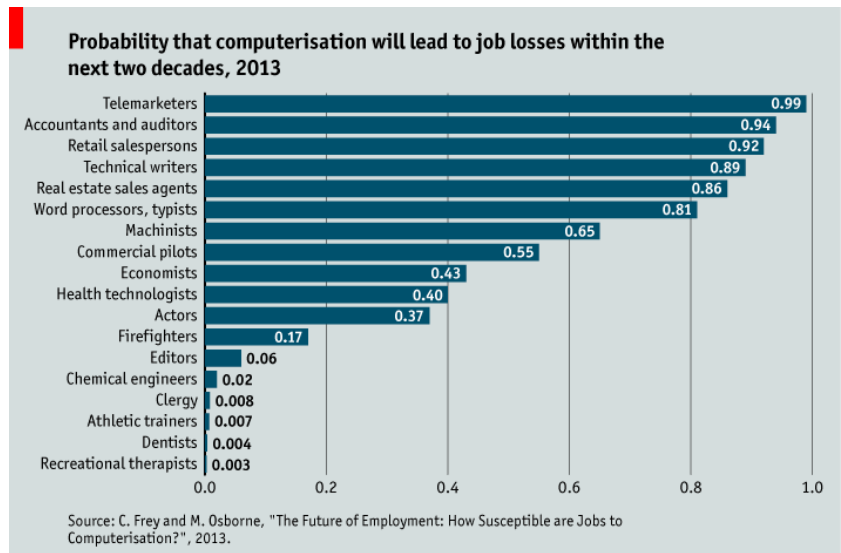
An emerging trend of great interest to academics and policymakers in recent years is workforce polarization in developed countries. As the proportion of middle-skilled,⁵⁷ middle-wage workers declines, there is increased “hollowing of the middle,” with the middle-skilled often forced to take up a low-skilled job. Based on evidence from a recent paper,⁵⁸ the employment share of middle-skilled jobs decreased substantially during the period 1993 to 2010 across advanced economies, with the average decline in share in the EU at 11.8%.

This trend has shown no sign of abating in recent years. According to research by the Associated Press, half of the 7.5 million jobs lost during the recession of 2008 in the US were in middle-class jobs whose pay ranges from US\$38,000 to US\$68,000. However, only 2 percent of the 3.5 million jobs gained since the recession is said to have ended (in June 2009) have been in these jobs.

In the countries that use the Euro as currency, this continuing pattern is even more evident. Almost 4.3 million low-pay jobs have been gained since mid-2009, but the loss of mid-pay jobs did not stop. A total of 7.6 million disappeared from January 2008 through to June 2012.⁵⁹

Researchers have been making progress in understanding the driving forces behind this trend. The leading explanation of labor economists is that many middle-skilled jobs are composed of routine tasks.⁶⁰ Increased technological sophistication and globalized markets have allowed the automation or offshoring of jobs that involve information processing and routine transactions, such as book-keeping, clerical work, and repetitive production tasks. Many more jobs will be susceptible to the same automation in the coming decades.

This trend in turn increases demand for tasks where workers have a comparative advantage. These occupations are composed of generally non-tradable jobs that either require complex



⁵⁷ A middle-skilled person is defined as a holder of a high-school degrees, but not a bachelor's degree.

⁵⁸ M. Goos, A. Salomons, and M. Vandeweyer, "Job polarization during the Great Recession and beyond," Euroforum KU Leuven, 2013.

⁵⁹ Associated Press, "AP Impact: Recession, Tech kills middle-class jobs," Jan 23 2013. (<http://bigstory.ap.org/article/ap-impact-recession-tech-kill-middle-class-jobs>).

⁶⁰ D. Autor, F. Levy, and R. Murnane, "The skill content of recent technological change: An empirical exploration," Quarterly Journal of Economics 118, Jun 2003.

interactions and abstract tasks, such as those of managers and doctors, or manual tasks that require visual and language recognition, physical strength and human interaction, such as those performed by janitors and fast-food workers.

Not surprisingly, the US Bureau of Labor Statistics (BLS) predicts employment to grow fastest in occupations where automation is difficult, specifically within healthcare, construction, and STEM occupations.

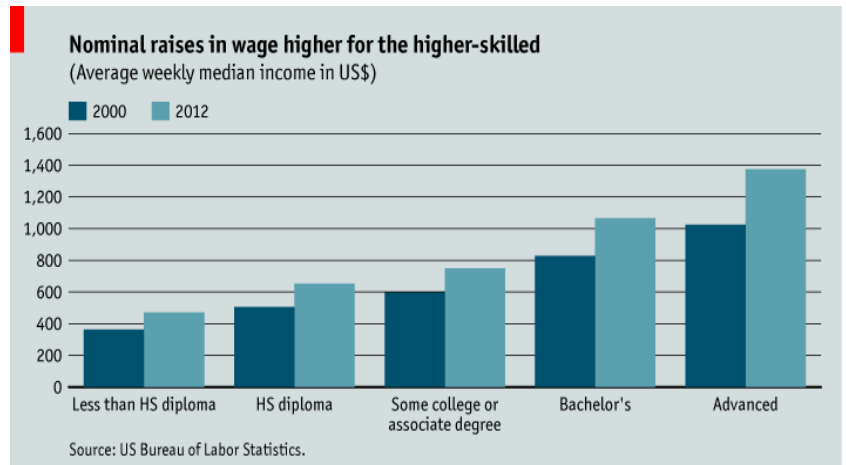
Table 2 - Projected US employment

	Healthcare Practitioners and Technical	Construction and Extraction	Computer, Engineering, and Science	Service	Education, Legal, Community Service, Arts, and Media	Transportation and Material Moving	Installation, Maintenance, and repair	Total	Sales	Management, Business, and Financial	Office and Administrative Support	Production
Emp 2010	7,799	6,328	7,205	29,136	15,517	9,005	5,429	143,068	14,916	15,565	22,603	8,594
Emp 2020	9,819	7,735	8,427	34,037	17,976	10,333	6,229	163,537	16,785	17,354	24,938	8,951
% change	26%	22%	17%	17%	16%	15%	15%	14%	13%	12%	10%	4%

Source: BLS.

The changes in employer demand for skills do not tell the full story. The available supply of skills resulting from shifts in educational attainment is also changing. In the US labor market, the relative increase in wages since the 1980s for college graduates is attributed to slower growth in supply.⁶¹ Similar studies exist for other industrialized countries, indicating a lower availability of the higher-skilled compared with the rising demand. The decline in the rate of growth of new college graduates in the US has naturally led to a steep rise in compensation for high-skilled workers, relative to that for low-skilled workers. Recent evidence from the BLS indicate that wages in the US have risen by US\$240-US\$350 per week for college and advanced degree holders during the period 2000-12, compared with only US\$110-US\$150 for holders of high-school diplomas or lower levels of educational attainment.

There are many debates in the US about whether education is worth it financially for the individual, with experts on one side arguing that the huge costs of education counteract any wage increases tied to holding a degree. However, in most countries around the world, higher education continues to be viewed as an attractive investment, with not only higher expected wages on average, but also better opportunities for employment. The latter also applies to the US, where the BLS reports that unemployment rates for high-school degree holders in 2012 was 8.3%, compared with 4.5% for bachelor degree holders. Increasing debt burdens from college education in the US require an evaluation of the existing policy, and an exploration of both the reasons behind the high costs and of less expensive alternatives, such as vocational schools.



Despite high unemployment rates in developed nations, a skills mismatch persists as employers struggle to fill positions. Many businesses are experiencing difficulty finding talent and offer high compensation to attract the best. McKinsey, a consultancy based in the US, predicts that, by 2020, the US will need 1.5 million more college

⁶¹ D. Autor, "The Polarization of Job Opportunities in the U.S. Labor Market," The Center for American Progress and The Hamilton Project, Apr 2010.

or graduate-degree holders than are currently available.⁶² According to OECD data, the US had 3.6 million unfilled vacancies in 2012. That same year, Australia had 175,000 open vacancies, Sweden had 46,000, and Poland had 40,000.

As employer demands and labor-force composition continue to evolve, governments and the private sector are taking a more active role in reducing the skills mismatch. Some have started with early intervention in the educational systems to equip future labor-force participants with the proper skills. For instance, Austria, Denmark, Germany, and Switzerland have a “dual system,” which combines school-based education with in-company training. While this dual system has been in place for many decades, lower unemployment rates among their youth during the most recent financial crisis are often attributed to this model. Some governments have started offering vocational training to provide the middle-skilled with additional skills to increase their employability opportunities or support their move to different sectors. However, these programs are still in the early stages, and their long-run success is still being evaluated.

Providing information about which skills the market rewards and which occupations are more lucrative is often a short-term cost-effective intervention to smooth market imperfections. Developments in technology can also allow employers and potential employees to find each other. A successful example is *SoukTel*, which provides such a platform using text messages. It operates in low-income countries, where young people are more likely to have mobile phones than broadband connections. Based in Palestine, *SoukTel* operates in 20 markets, including some in North Africa and Latin America. It has reportedly matched more than 20,000 skilled people with jobs since launching in 2006.⁶³

Many European states have focused on both demand-side and supply-side interventions. The EU’s Council of Employment and Social Affairs Ministers approved a proposal in February 2013 designed to mitigate youth unemployment by providing either good-quality employment, continued education, an apprenticeship, or a traineeship within four months of graduation or unemployment for those aged under 25. The program—The Youth Guarantee scheme—has a budget of €6 billion for the period up to 2020.⁶⁴

⁶² McKinsey Global Institute, “An economy that works: Job creation and America’s future,” Jun 2011.

⁶³ *The Wall Street Journal*, “Palestinian startup SoukTel matches job seekers, employers via mobile,” Dec 27 2012.

⁶⁴ European Union, “EU measures to tackle youth unemployment,” Nov 8 2013. (http://europa.eu/rapid/press-release_MEMO-13-968_en.htm).

Challenges for human resource management and global business strategy

Companies must navigate the choppy waters of a complex global economy, and position themselves to attract and retain the workers they will need on this journey.

As this paper has shown, firms will face several challenges from both the future workforce and from the changing nature of work itself. As a result, HR managers will need to get ahead of the game by understanding these major future demographic, technological and societal shifts, and then preparing themselves accordingly.

The nature of the worker

HR challenge: Adapting to a rapidly changing worker profile

Sweeping demographic changes across both the developed and developing world will place greater pressure on both the government and private sector to initiate and implement creative solutions to educate, integrate and retain a rapidly changing and diverse working population.

With hundreds of millions of women predicted to pour into the global workforce in the coming years, and temporary and part-time workers a significant and seemingly permanent fixture, companies need to adapt further to a new breed of employee. When you add the issues of a multi-generational workforce and growing cultural diversity, it is no surprise that people management is cited to be by far the most substantial challenge facing companies over the next five to ten years, according to a 2013 survey of 636 C-level and senior executives by The Economist Intelligence Unit, sponsored by the SHRM Foundation.

Ageing populations across the globe will continue to pose a challenge for businesses. On the one hand, experienced employees are departing the workforce, leaving a leadership void. On the other hand, many older workers, particularly those in the US and other industrialized countries, plan to carry on working well past the traditional retirement age. Many will simply need to continue earning, as social safety nets, pensions and other benefits will no longer be adequate or available. But HR will need to establish more targeted incentive structures to keep less committed older workers in the workforce. Companies will also need to anticipate and assess which new skills and training older employees will require, particularly in the realm of technology where they may feel less comfortable than many of their younger colleagues.



Even if more babyboomers can be persuaded to stay around for longer, many companies will feel vulnerable as they leave the workforce in droves over the next few years. Companies will need to manage the successful transfer of experience and knowledge to younger generations at the outset of their careers. If demand continues to outstrip supply for certain positions, companies will also need to rethink how to hire junior workers into positions requiring more tenure and experience, and determine what additional training will be necessary.

Preparing the world's youth for the workplace will certainly present challenges. In countries with high youth-unemployment rates, there are increased concerns that many young people will leave the workforce permanently,

producing a lost generation. Meanwhile, the skills and education of the millennials who remain in the workforce must always be relevant and attractive to employers. As we see below, governments, companies and educational institutions will need to create solutions that reform the educational system, and prepare the future workforce for employment opportunities.

Companies have so far struggled to maximize the potential of women, who are dramatically under-represented at the top of major companies. A mere 13 out of the largest 500 companies in the world by revenue had women CEOs in 2012, a proportion of just 2.6 percent.⁶⁵

Nine of these CEOs were in the US, where, nevertheless, women occupied just 16.9 percent of corporate board seats in Fortune 500 companies in 2013.⁶⁶ In Southern Europe, in countries such as Greece, Portugal and Spain, that figure is comfortably within single figures.⁶⁷

The standard reason given for female under-representation at the top of the business world is the fact that women often take time out of the workplace to look after a family. However, around one in four American graduate women is now childless in their mid-forties,⁶⁸ reportedly rising to one in three in Germany.⁶⁹ Clearly, other factors, such as the lack of female role models and the challenges of breaking into a male-dominated club, also play a part. Whatever the cause, the result is a waste of the talent that companies maintain is so difficult to find.

This issue has been embraced by politicians keen to curry favor with the female half of the electorate. Pressure from governments is set to increase. Despite opposition from certain countries, a plan to increase the minimum proportion of female non-executive directors in public companies across Europe to 40 percent is winding its way through the EU legislature.⁷⁰

With the tide turning, companies will feel they need to seize the initiative before political interference imposes unwanted changes. Mentoring from senior female executives to their younger counterparts and the early identification and rapid career development of high-potential women are both essential aspects of a proactive approach.

Perhaps most importantly, companies will need to find a way to keep these high-potential women in the fold, committed and interested, if and when they take a temporary break from full-time work due to family commitments. Continued dialogue with mentors, and involving them in discrete, but strategically important, home-based projects with senior management access, may both help.

More broadly, HR will have to meet women's demands for equal pay and promotions in addition to customized benefits and perks like daycare, flexible hours, maternity leave and child healthcare.

With employee benefits, one size does not fit all. The incentive systems of the past no longer satisfy all employees, especially with the labor force expanding to include a more varied and international workforce.

⁶⁵ High Pay Centre, "Global CEO appointments: a very domestic issue", 2013. (http://highpaycentre.org/files/CEO_mobility_final.pdf).

⁶⁶ Catalyst, "Catalyst 2013 Census of Fortune 500: Still No Progress After Years of No Progress", Dec 10 2013. (<http://www.catalyst.org/media/catalyst-2013-census-fortune-500-still-no-progress-after-years-no-progress>).

⁶⁷ *The Financial Times*, "Quotas for female board members look like a toad too far," Jan 9 2014. (<http://www.ft.com/cms/s/0/e06ac8bc-784a-11e3-831c-00144feabdc0.html#axzz2rEx8m1lp>).

⁶⁸ Pew Social Trends, "Childlessness Up Among All Women; Down Among Women with Advanced Degrees," Jun 25 2010. (<http://www.pewsocialtrends.org/2010/06/25/childlessness-up-among-all-women-down-among-women-with-advanced-degrees/>).

⁶⁹ *The New York Times*, "In Germany, a Tradition Falls, and Women Rise," Jan 17 2010. (<http://www.nytimes.com/2010/01/18/world/europe/18iht-women.html?pagewanted=all>).

⁷⁰ *The Financial Times*, "Quotas for female board members."

HR challenge: Understanding the subtleties of workers' qualifications

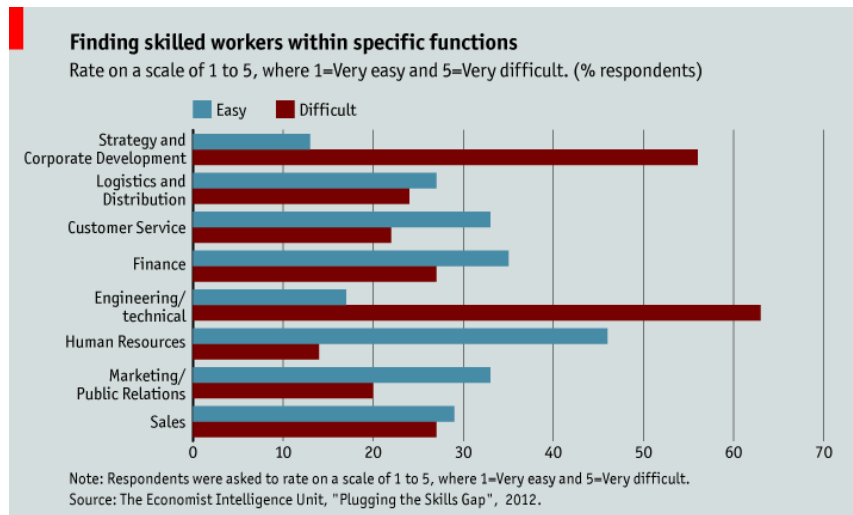
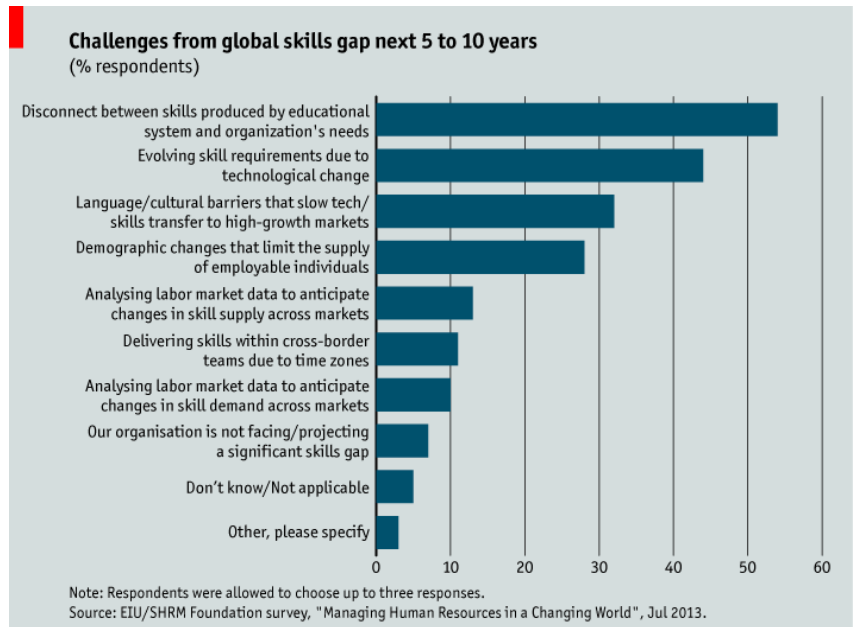
As the definition of work continues to evolve, the range of skills that employees need have not necessarily been provided by traditional educational systems. In the 2013 EIU/SHRM Foundation survey, executives reported that the current disconnect between the skills fostered by education and those they actually need will represent a very considerable obstacle in the coming years.

This makes it difficult for HR to assess applicants' qualifications properly. To complicate matters further, there is lack of standardization in education, especially in a global context. As businesses expand and hire beyond borders, the need for HR to scrutinize job qualifications carefully becomes ever more important. Major disparities exist between various regions and institutions in individual countries, as well as between countries. The ability to understand these differences will enable HR to make more informed hiring decisions. Through collaboration with other functions of the organization, HR can increase its understanding of qualifications and skill sets to ensure that hired employees are capable of executing their functions.

Population decline, due to lower birth rates, along with stagnant educational reform, have prompted many organizations to fear future skills shortages, particularly in certain roles. A 2012 Economist Intelligence Unit survey of senior executives throughout the world revealed that the most problematic recruitment challenges, by a substantial margin, relate to technical/engineering roles, and to the strategy and corporate-development function.⁷¹

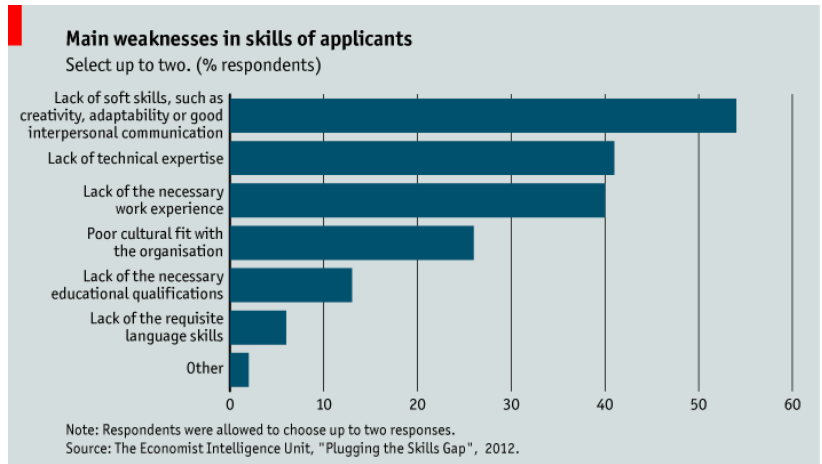
Strategic vision and the ability to handle complexity were cited to be the most difficult skills to find among senior executives, presumably also the reason why strategic roles are deemed so problematic to fill. Companies are clearly struggling to recruit those with the apparently rare ability to guide them through an unpredictable and competitive external environment.

For positions lower down the organization, executives are particularly perturbed by a lack of soft skills, such as creativity, adaptability and good interpersonal communication.



⁷¹ The Economist Intelligence Unit, "Plugging the skills gap," 2012. (http://www.cfoinnovation.com/system/files/Plugging_the_Skills_Gap_EIU.pdf).

The lack of advanced soft skills appears particularly acute in Asia Pacific, causing concern to the many global companies seeking a rapid expansion in the region. In an executive survey conducted for the *2011 Global Talent Index*, written by the The Economist Intelligence Unit and published by Heidrick & Struggles, 52 percent of Asia Pacific respondents said that “limited creativity in overcoming challenges” was a primary shortcoming among candidates, compared to 37 percent in Western Europe and 36 percent in North America.⁷²



Without these skills, vast swathes of the graduate population in some emerging markets are deemed unemployable. How do companies overcome these twin shortages of technical and engineering skills on the one hand, and soft skills on the other? A multi-faceted approach is necessary, as companies take a more proactive role in securing the qualifications they are looking for.

First, companies will need to foster a close relationship and dialogue with educational institutions and governments. “Access to STEM talent is integral to our success in the next three to five years,” says Brian Silva, Chief Human Resources Officer and Senior Vice-President of Administration at Fresenius Medical Care, which specializes in the production of medical supplies. “We need to partner with educational institutions to change the way courses are being taught, ensuring they address contemporary business issues and future business strategy.” This collaboration could prove pivotal in equipping the future workforce with the necessary skills to bridge the labor-market gap. Organizations can influence the material being taught through redesigning curricula with policymakers, and developing creative education solutions.

Indeed, they may explore potential partnerships with universities to provide technical and vocational-skills training, or continuous education opportunities. One Indian-based education and training company, Global Talent Track, has been based on this principle of collaboration between various stakeholders. It is funded by Intel Capital, Helion Ventures and Cisco Systems, with its founders emanating from industry, academia and technology. By 2015, it seeks to equip 500,000 aspiring students with the vocational skills that they will need in the workplace.⁷³ Another example in India is the public-private partnership (PPP), *The National Skills Development Corporation*, which promotes skill development by catalyzing the creation of large, high-quality, for-profit vocational institutions. These types of initiatives give raise to the broader policy question: Who should bear the burden of educational investment in workforce-skills development—individuals themselves, corporations or governments?

Another method of counteracting any deficiencies in the educational system is to establish an efficient internal-training and development system. For example, the Indian IT industry has instituted what the entrepreneur and academic, Vivek Wadwha refers to as “a surrogate education system”.⁷⁴ The IT services company Infosys is reported to have the largest corporate university in the world, having trained around 100,000 graduate recruits in writing software codes and formulating algorithms since it was first established in 2002.⁷⁵

⁷² Heidrick & Struggles, “The global talent index report: The outlook to 2015,” 2011.

(<http://www.economistinsights.com/sites/default/files/downloads/GTI%20FINAL%20REPORT%205.4.11.pdf>).

⁷³ <http://www.gttconnect.com/>

⁷⁴ Foreign Policy, “Chinese and Indian entrepreneurs are eating America’s lunch,” Dec 28 2010.

(http://www.foreignpolicy.com/articles/2010/12/28/chinese_and_indian_entrepreneurs_are_eating_americas_lunch).

⁷⁵ *Silicon India News*, “Infosys has trained 100,000 graduates at Mysore campus,” May 31 2012.

(<http://www.siliconindia.com/news/technology/Infosys-Has-Trained-100000-Graduates-at-Mysore-Campus-nid-118218-cid-2.html>).

HR challenge: Retaining and engaging a changing workforce

As the demographic composition of the workforce changes, their motivations and expectations evolve too. It is imperative that HR understands what is most valued by these workers. Is it compensation, or prestige, or perhaps autonomy at work? In many cases, HR will have to adapt their incentives, benefits policies, and retention strategies for workers that are not just driven by financial compensation. It is not enough simply to recruit able staff. Companies have to make sure that their people are committed, productive, and do not leave after a short period, incurring substantial turnover costs and wasting all previous training invested in them.

This will be no easy task. Much of the workforce is not engaged in their work. According to Gallup’s latest 142-country study on the global workforce, only 13 percent of workers worldwide are “engaged,” meaning that they are psychologically committed to their jobs. The bulk of the working population—63 percent—are “not engaged,” indicating that they lack motivation. A substantial minority—24 percent—are “actively disengaged,” unhappy and unproductive and liable to spread negative attitudes to co-workers.⁷⁶

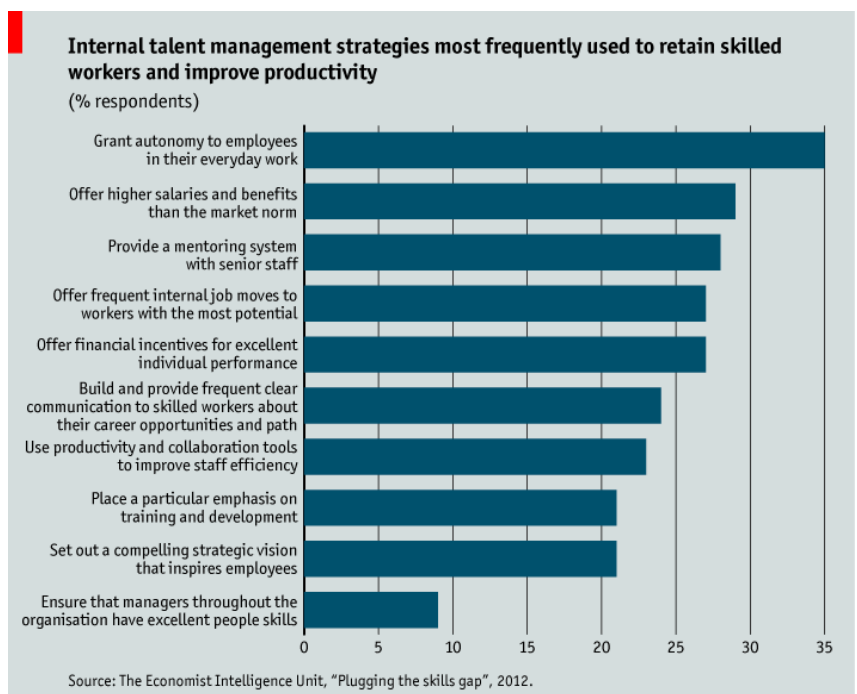
Generation Y, as they are commonly known, are reputed to have low organizational loyalty and are eager to make an impact. Even if these younger, skilled workers are committed, retaining them is a major challenge and HR will have to explore varied retention techniques, adapted to the preferences of the relevant individual.

Companies have sought to respond to millennials’ needs according to their size. Smaller companies, in particular, have cottoned on to the idea that modern-day workers are more likely to crave freedom from micro-management. Nearly half of the sample of the smallest companies in a 2012 Economist Intelligence Unit survey grant autonomy to workers as a talent-management tool, a percentage that decreases as the company becomes larger and more bureaucratic. One company in this smaller category is Zensar Technologies, who solicits opinions from a diverse cross-section of their workforce, not least as a means to increase employee engagement (see the Workforce motivations section for a case study on Zensar).

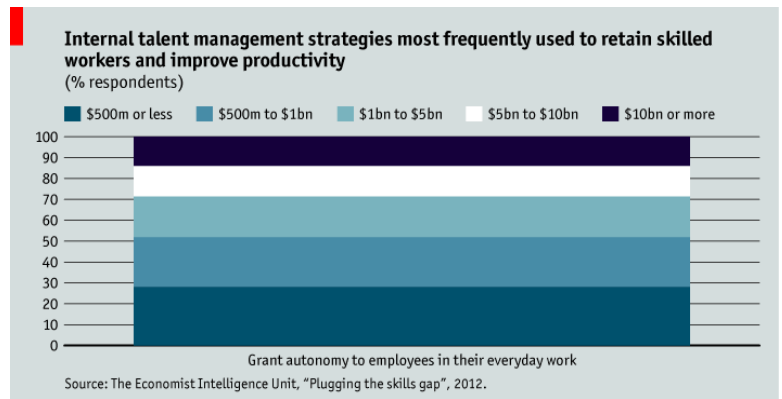
⁷⁶ Gallup, “Worldwide, 13 per cent of employees are engaged at work,” Oct 8 2013. (<http://www.gallup.com/poll/165269/worldwide-employees-engaged-work.aspx>).

	Engaged	Not Engaged	Actively Disengaged
United States and Canada	29%	54%	18%
Australia and New Zealand	24%	60%	16%
Latin America	21%	60%	19%
Commonwealth of Independent States and nearby countries	18%	62%	21%
Western Europe	14%	66%	20%
Southeast Asia	12%	73%	14%
Central and Eastern Europe	11%	63%	26%
Middle East and North Africa	10%	55%	35%
South Asia	10%	61%	29%
Sub-Saharan Africa	10%	57%	33%
East Asia	6%	68%	26%

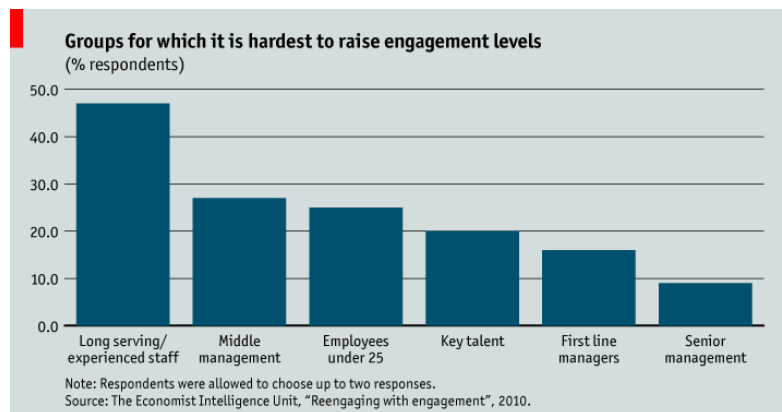
Note: Results were collected among 73,752 respondents 18 and older in 141 countries and 151,335 U.S. respondents.
Source: Gallup World Poll and Gallup Daily tracking survey, 2013.



The largest companies in the Economist Intelligence Unit survey are likely to use the size of their organization as a motivational tool, offering varied assignments in different parts of the world to workers with high potential. This policy serves a dual purpose. It allows companies to plug any skills gaps in certain parts of the world, while also providing opportunities that many younger employers are seeking. A 2011 PricewaterhouseCoopers (PwC) survey found that 71 percent of Generation-Y workers expect and want to complete an overseas assignment during their career.⁷⁷



Motivational strategies for younger workers are particularly necessary in regions of the world where there is intense competition for candidates with the right skills. With multinational companies expanding, local companies multiplying and the number of 15-24-year-olds entering the labor force expected to fall by almost 30 percent during this decade,⁷⁸ China is likely to be an exceptionally harsh battleground. A 2012 McKinsey study reported that senior managers working for the China divisions of multinational firms switch companies at a rate of 30 to 40 percent a year—five times the global average.⁷⁹ Keeping salary costs down to a commercially acceptable level will be a challenge. Average salaries are predicted to increase between 6 and 10 per cent in China in 2014.⁸⁰



Retaining the older workers who wish to delay retirement over the coming years may be less of an issue. However, getting the best out of them might be. A 2010 Economist Intelligence Unit survey found that they are the hardest group to motivate. Of respondents, 47 per cent believed that, of all groups in the workplace, it is hardest to engage "long-serving or experienced staff," with only 25 percent citing "employees under 25."⁸¹

The Nature of work

HR challenge: Aligning technology best practices to global management strategy

In the last 20 years, new communication technology, such as email, mobile phones and web and video conferencing has not only facilitated closer contact with clients in distant lands, it has allowed multinational companies to form cross-border teams, where colleagues can communicate with each other constantly, despite not being located in the same place. In short, technology has enabled the international expansion that companies seek.

⁷⁷ PwC, "Millennials at work: Reshaping the workplace," 2011.

(http://www.pwc.com/en_M1/m1/services/consulting/documents/millennials-at-work.pdf)

⁷⁸ *The Economist*, "Socialist workers: Is China's labour market at a turning-point," Jun 10 2010.

(<http://www.economist.com/node/16319562>)

⁷⁹ McKinsey, "Winning the \$30 trillion decathlon: going for gold in emerging markets," *McKinsey Quarterly*, 2012.

(http://www.mckinsey.com/features/30_trillion_decathlon).

⁸⁰ M. Page, "Double-digit salary increases and high employee turnover forecast across China in 2014," Dec 12 2013.

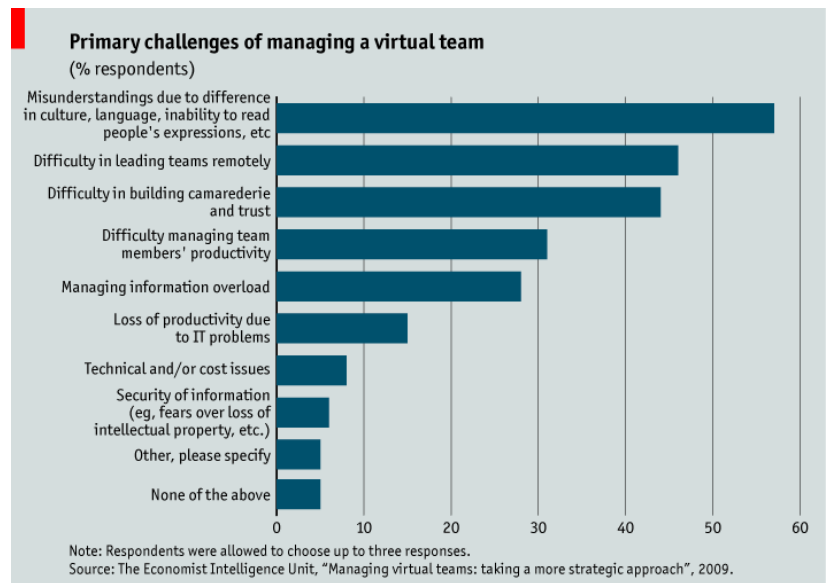
(<http://www.michaelpage.com.cn/ContentArticle/page/8703/title/Double-digit-salary-increases-and-high-employee-turnover-forecast-across.html>).

⁸¹ The Economist Intelligence Unit, "Reengaging with engagement," ViewsWire, 2010.

(http://viewswire.eiu.com/report_dl.asp?mode=fi&fi=987641483.PDF).

Saving on business travel and relocation costs for individual workers have been other major benefits. Virtual teams also significantly enlarge the pool of available knowledge. Individual team members can offer extensive experience with different markets and an understanding of geographically disparate customer demands and sensitivities. An overwhelming majority (83 percent) of executives in a 2014 Economist Intelligence Unit report agreed that a diverse workforce improves their company's ability to capture and retain a diverse client base.⁸²

Culturally diverse virtual teams also stimulate innovation and creativity. Groupthink—decision-making within a group, characterized by uncritical conformity—is more likely within a team composed of people from the same background.



Technology's evolving role in redefining what work means will require firms to come up with new and innovative strategies to manage their increasingly mobile workforce. These strategies will need to help mobile workers remain engaged and connected to the wider organization they serve. An improved ICT infrastructure and increased usage in developing nations will certainly continue to expand the availability of local talent for recruiters and HR managers. However, challenges will persist, as many potential labor-market participants will lack access or adequate technological literacy. HR departments within major global firms will need to engage with local governments, universities, community colleges and vocational schools to offer ongoing training for all existing and new employees as technologies change.

With companies now engaging with a flexible and mobile workforce, performance measures will have to be revamped. Once managers prioritize outcomes, and not just productivity or process, new evaluation models will be necessary. HR will also need to assess the most effective methods for managing and communicating with teleworkers, particularly across borders.

HR challenge: Managing the risks of a global operation

Despite their clear benefits and growing importance, managing remote, cross-border teams presents management challenges that the corporate world is still learning to tackle. A 2009 Economist Intelligence Unit executive survey reported that one-third of virtual teams are thought to be badly managed.⁸³

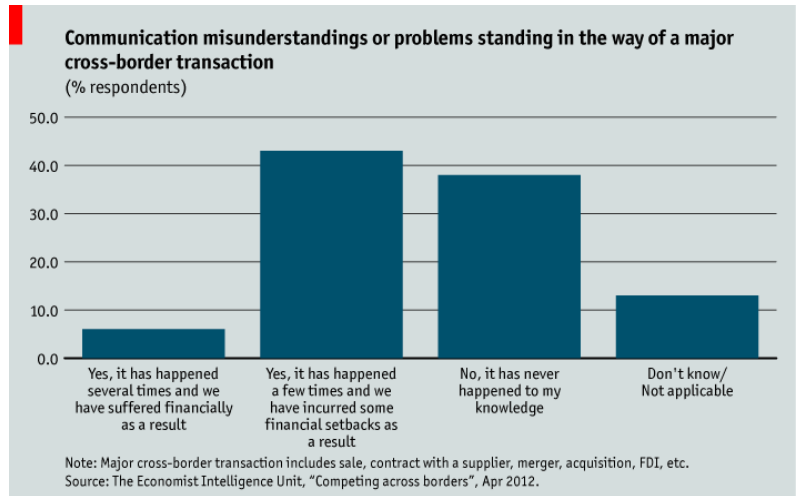
There are some obvious practical obstacles in running a virtual team. For example, all the members must feel comfortable using all the various communication technologies. Time differences can also complicate organization and co-ordination.

⁸² The Economist Intelligence Unit, "Values-based diversity: what it means and why it matters," 2014. (http://www.successfactors.com/en_us/lp/values-based-diversity.html).

⁸³ The Economist Intelligence Unit, "Managing virtual teams: taking a more strategic approach," 2009. (http://graphics.eiu.com/upload/eb/NEC_Managing_virtual_teams_WEB.pdf).

Human interaction may be less smooth without face-to-face communication. Natural social bonds are more difficult to develop when people only meet virtually. This makes building an environment of trust and co-operation more problematic, resulting in regular misunderstandings. When disagreements do arise, the less frequent contact makes them harder to resolve.

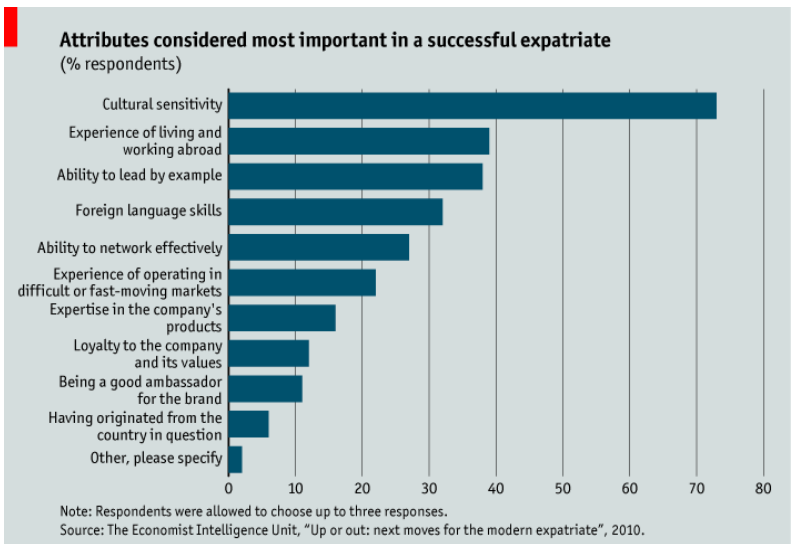
However, a 2009 Economist Intelligence Unit survey found that it is cultural and linguistic differences that present by far the most pressing challenge for virtual-team managers. Differences in culture appear in a broad range of attitudes and values, greatly increasing the potential for a breakdown in team cohesiveness. Such differences span a wide range of areas, including attitudes toward authority, teamwork and working hours.



Cultural and linguistic misunderstandings, both internally and with prospective clients, can be very costly. Another Economist Intelligence Unit survey, this time from 2012, found that one-half of companies admit that communication misunderstandings have stood in the way of a major cross-border transaction, incurring significant losses for their company.⁸⁴

The failed 1998 merger of two car manufacturers, Germany's Daimler-Benz AG and the American Chrysler Corporation, provides a prominent illustration of the economic costs of cultural conflict. Several commentators have suggested that Daimler's formal and hierarchical structure clashed irreconcilably with Chrysler's more relaxed and less differential approach, resulting in defections of key personnel and the eventual breakdown of the relationship.⁸⁵

Cross-border teamwork is so important to companies' performance that it cannot be left to individual managers to grapple with by themselves. They will need assistance and guidance on how to approach a very different managerial challenge from those they have faced with traditional co-located teams.



Adequate financial resources will need to be allocated to the IT infrastructure, which is such a crucial element in the proper functioning of a virtual team. Leadership training in topics such as the resolution of conflict, instilling purpose, and how to ensure mutual trust and clear communication within a far-flung team are essential. Organizations also need to advise managers on the selection of team members for a cross-border team, with a greater emphasis on the ability to handle cultural differences than is necessary for traditional teams. A 2010

⁸⁴ The Economist Intelligence Unit, "Competing across borders," Apr 2012. (<http://www.economistinsights.com/search/node/competing%20across%20borders>).

⁸⁵ See, for example, *The Economist*, "The DaimlerChrysler emulsion", Jul 27 2000. (<http://www.economist.com/node/341352>).

Economist Intelligence Unit survey of executives with international experience discovered, for example, that “cultural sensitivity” was by an overwhelming margin the most important attribute of a successful expatriate.⁸⁶

Over the next five to ten years, employers will need to implement more sophisticated recruitment policies as the global talent pool expands and operating risks (geopolitical, legal and financial) become more complex. They will also need to build a common work culture, encompassing similar ethics and values, among people who hail from very different cultures.

HR will need to become better integrated into their firm’s overall risk-management and business-continuity planning. Specifically, it will have to be more involved in assessing, and preparing for, disruptive events, such as natural disasters, IT-system or operations outages, and interruptions to increasingly global and complex supply chains. With regard to supply chains, HR will have to be more attuned to corporate social-responsibility practices. As the number of global suppliers and subcontractors increases along both the production and distribution chain, HR will need to understand and anticipate the types of risks (such as use of child labor, toxic or substandard components, bribery or other illegal business practices) that could have a negative impact on the firm’s brand and company image.

For employers, many investment and hiring decisions are contingent on a stable regulatory framework. However, motivated by the financial crisis of 2008 and political considerations, many governments have introduced unexpected labor regulations. One example is the sudden introduction in the US of the *Family and Medical Insurance Leave Act* of February 2014, which will supply up to three months of paid leave in certain defined circumstances. The payment would be limited to 66% of the employee’s income, up to a maximum of US\$1,000 per month, and would be funded through a system of regular small additional contributions by employees and employers.⁸⁷

Higher employee termination costs in China in the past six years have surprised many foreign investors in the country.⁸⁸ Meanwhile, some OECD countries, such as France and Spain, have sought to make their traditionally rigid labor regulations more flexible. Taken as a whole, the rising unpredictability of public policy in the context of global economic hardship may persuade some companies to think twice about potential investment and hiring strategies.

As mergers and acquisitions (M&A) activity increases around the world, HR will also have to be equipped with the right business intelligence to conduct cultural, organizational and legal due diligence when going through the acquisition process. This is especially true for US firms that acquire companies across Asia, Latin America and other parts of the developing world, where firms operate very differently. Currently, there is no standard HR playbook or HR Sarbanes-Oxley to oversee the integration process. Instead, different country rules in respect of pensions, benefits and severance make it very challenging for HR managers to stay abreast of the latest laws and regulations. This means that HR leaders will need to expand their knowledge base and shift from being nationally focused to a more global perspective.

As other regions become more attractive for investment, companies will look beyond traditional destinations for outsourcing or operations. HR will have to get up to speed quickly on human-capital issues in these potential markets. However, given insufficient knowledge about labor markets in developing countries, HR cannot always make informed decisions. Unfortunately, there is a severe lack of hard data and qualitative insights at the occupational, education and skills levels. Companies, therefore, face the question of who will be responsible for supplying this data to HR departments. Will it be governments or third-party providers? Whatever the source, HR managers will need to find sufficiently reliable data and analytics to make sound strategic business decisions, and minimize risk.

⁸⁶ The Economist Intelligence Unit, “Up or out: next moves for the modern expatriate,” 2010. (http://graphics.eiu.com/upload/eb/LON_PL_Regus_WEB2.pdf).

⁸⁷ *The Huffington Post*, “It’s time for paid family and medical leave to empower working women and modernize the workplace,” Feb 5 2014.

⁸⁸ *The New York Times*, “China passes a sweeping labor law,” Jun 30 2007.

At the crossroads: Conflicting expectations of workers and the workplace

HR challenge: Hiring and retaining talent while lowering labor costs

Large labor-productivity gains over the past few decades have not been matched by comparable wage gains. While both increased technology adoption and globalization contribute to this phenomenon, companies' increased focus on maximizing shareholders' value has also been a substantial factor. Furthermore, looser labor laws and decreased union rates have decreased workers' bargaining power. While this trend has been in existence for a while, pressure across corporations to curb labor costs has only become more acute with the latest global financial crisis.

Retention of talent will prove challenging, as employees feel that stellar performances are not being rewarded appropriately. While their employers continue to have higher work expectations, employees' efforts are not necessarily translating into compensation they deem to be satisfactory. This is creating a challenge for HR as turnover rates increase. Finding and hiring talent will not prove any easier, as firms continue to decrease their labor investment. On a day-to-day basis, workers may not be as motivated and engaged. HR will have to continue to explore retention strategies and benefits models that focus on factors beyond financial compensation.

Companies may often prefer to have flexible arrangements with employees and avoid costly employee benefits by hiring non-traditional workers. However, developing and engaging the legions of part-time, temporary and freelance workers at all levels of the company is a growing issue for companies. As we have seen, many part-time staff, and most temporary staff, would rather be working on a more long-term footing. To complicate matters, as a recent paper by Cappelli and Keller⁸⁹ discusses, temporary workers often find themselves in "triangular arrangements," where it is unclear whether their organizational loyalties lie with temporary agencies or the hiring organization. The costs of less engaged staff with lower organizational loyalty—poor customer service, less attention to quality, little commitment to the company, and higher levels of turnover—threaten to be more substantial than the savings incurred by resorting to flexible employees.

Individual managers will, therefore, need overarching guidance on how to get the most out of non-traditional staff. Making them feel part of the company, getting feedback from past workers on how to improve the non-traditional working arrangement, and ensuring that the recruitment process is equally rigorous for all staff, whatever the nature of their contract, may all form part of any co-ordinated approach.

HR will find it difficult to reward high-performing part-time and flexible workers, and will have to explore methods to offer benefits or incentives to retain them in the pipeline for future work. Given that such contracts often specify work outcome, rather than the process itself, there is less ongoing engagement between a manager and contractor. This makes it more difficult for managers to review work using traditional performance-review systems.

HR challenge: Winning the war for talent

People migration, both cross-border and within countries, adds another layer of complexity to the labor market. Governments play a big role in determining and controlling that flow of labor. However, as organizations continue to expand globally and face skills shortages locally, many require a more mobile workforce. Therefore, organizations and governments alike will seek to understand and gather data on how migration patterns are affecting the composition of the labor market, and how educational attainments and skill sets are shifting.

Governments are often torn between the need to import the necessary skills for the economy, and populist pressure to curb immigration. But that pressure normally focuses on unskilled immigrants, and the associated strains on public services and the benefits system. Many companies are devoting more resources to lobbying for a relaxation of curbs on the most skilled workers. A research group, Center for Responsive Politics, reported that

⁸⁹ P. Cappelli and J. Keller, "Classifying work in the new economy," Academy of Management, 2013.

the total number of companies lobbying on immigration in the US Congress rose to 355 in 2012, with technology companies the most active.⁹⁰

Where more stringent migration laws exist, HR may have a limited talent pool from which to hire, often making it challenging to hire the right people. In countries with looser policies, HR will have to define hiring strategies and outreach programs to be able to tap into the larger workforce pool.

As well as integrating different cultures and nationalities into their workforce, HR will have to grasp the intricacies of migration legislation to ensure that its employees are allowed to participate legally in the workforce. Getting acquainted and abiding by migration laws is not only a costly process, often requiring the hiring of many lawyers and exorbitant visa fees, but often a very complex one, with both policies and national sentiments continuing to fluctuate.

To incentivize employees to work overseas, HR needs to redefine mobility strategies and meet deployment demands, including access to schooling and medical facilities, and comparable standards of living to those experienced in their home country. Research shows that the inability of an expat's family to acclimatize to a new environment is the most frequent cause of the failure of an employee assignment abroad. Companies will need to provide imaginative support to spouses and children, as well as their employees, if they are serious about global mobility.

As businesses expand to countries with more politically unstable environments or with higher levels of risk, businesses may find it difficult to find employees who are willing to move to these locations. The proper security measures must be in place.

⁹⁰ Open Secrets blog, "Special interests battle over immigration reform," Mar 4 2013. (<https://www.opensecrets.org/news/2013/03/special-interests-weigh-in-on-immig.html>).

CONCLUSION

In their 2013 paper, “The future of employment: How susceptible are jobs to computerization”, Oxford University academics, Carl Benedikt Frey and Michael Osborne, predict that even accountancy, a profession that has long been portrayed as the ultimate symbol of mundane stability and job security, is almost certain to suffer significant unemployment within the next 20 years.⁹¹ With predictions like this, we can assume that many things we now take for granted about the modern-day workplace will soon diminish or disappear completely.

Savvy individuals will seek to stay ahead of the game before events overtake them, acquiring the skills and experience that the companies of the future will need. To do this, they will have to rely principally on their good sense and instinct. Major companies, however, have no such excuse. They have the resources and the collective manpower to understand and even fashion the future, and then modify their organizations accordingly.

So many fundamental issues—changes in the age, cultural and gender profile of workers, flexible working, skills shortages, technological impact, the decline of the *job for life*—now confront the HR strategist. It has surely never been a more exciting or interesting time to be one. People are the very lifeblood of a knowledge economy. And those people, along with their working routine and the nature of their jobs, are changing in front of our eyes. Will companies be sufficiently alert and nimble to respond to this huge challenge?

⁹¹ C. Frey and M. Osborne, “The future of employment: How susceptible are jobs to computerization,” The Oxford Martin programme, Sep 2013. (http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf).

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Notes

Notes

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