

TOOL KIT

An aging workforce will compel businesses to change how they operate and could even threaten some companies' viability. How vulnerable is your business?

Managing Demographic Risk

by Rainer Strack, Jens Baier, and Anders Fahlander

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Managing Demographic Risk

The Idea in Brief

Around the globe, workforces are steadily aging, thanks to declining birth rates and the graying of the baby boom generation. Soon, boomers will be retiring in droves, taking critical knowledge and skills with them. And older employees who remain may become less productive.

These demographic risks could damage your company. You *can* manage them, say Strack, Baier, and Fahlander. But start now—your solutions will take years to produce results.

First, assess your **capacity risk** (the impact of mass retirement on your firm's ability to make a product or provide a service) and **productivity risk** (the effect of aging on job performance). Analyze these risks for each location, unit, and job type. Then develop a portfolio of measures to mitigate anticipated labor shortages. For example, combine cross-training and outsourcing with sophisticated recruitment and retention programs.

Manage demographic risk proactively, and you retain essential talent while also getting a leg up on your competition.

The Idea in Practice

ASSESSING THE RISKS

To assess *capacity risk*:

- For every location, business unit, and job function, estimate how many available workers you will have over the next 5–15 years, based on anticipated retirement and attrition rates.
- Estimate your future workforce needs, taking into account factors such as your company's growth strategy and industry changes that might require new types of jobs.
- Calculate the difference between estimated workforce supply and demand to determine whether and where you will face a talent shortfall.
- Assess the difficulty of closing any gaps in needed skills, taking into account factors such as lengthy training times for specialized jobs and availability of skilled workers in the external labor market.

► Example:

RWE Power's capacity risk analysis showed it would face a shortage of certain kinds of highly specialized engineers, that few of these engineers would be entering the job market in coming years, and that competition to hire them would be fierce among the few large utility companies—creating a capacity challenge for this job.

To assess *productivity risk*:

Determine which jobs are at risk because of employees' ages *and* the nature of the work. Productivity risk arises when older workers:

- Lose the robustness needed for physically demanding jobs
- Lack up-to-date skills owing to technological changes
- Lose motivation because they see fewer career opportunities ahead
- Become susceptible to health problems

MANAGING THE RISKS

To manage *capacity risk*, consider approaches including:

- **Productivity improvements.** Process enhancements and technical innovations can reduce your need for new workers in particular jobs.
- **Outsourcing.** This strategy can be especially effective in jobs for which a temporary labor shortage is looming or that involve work of limited strategic importance.
- **Job transfers.** Tap a surplus of workers in a particular job type at one location or business unit to fill a gap in the same job at another site or unit.
- **Cross-training.** For example, at RWE Power, high-voltage electricians working on large mining equipment can (after a short learning period) undertake high-voltage tasks at a power plant.

To manage *productivity risk*, consider strategies including:

- **Training.** Provide training that helps older employees stay current on operational technology and job-specific knowledge.
- **Health care management.** Reward workers who regularly engage in exercise and apply other healthy practices; for example, by offering additional vacation days.
- **Performance incentives.** Recharge older employees' interest in their work by encouraging them to mentor new workers or participate in special projects on a freelance basis after they've retired.

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Most executives in developed nations are vaguely aware that a major demographic shift is about to transform their societies and their companies—and assume there is little they can do about such a monumental change. They're right in the first instance, wrong in the second.

The statistics are compelling. In most developed economies, the workforce is steadily aging, a reflection of declining birth rates and the graying of the baby boom generation. The percentage of the U.S. workforce between the ages of 55 and 64, for example, is growing faster than any other age group.

The situation is particularly acute in certain industries. In the U.S. energy sector, more than a third of the workforce already is over 50 years old, and that age group is expected to grow by more than 25% by 2020. The number of workers over the age of 50 in the Japanese financial services sector is projected to rise by 61% between now and then. Indeed, even in an emerging economy like China's, the number of manufacturing work-

ers aged 50 or older will more than double in the next 15 years.

But national and even industry statistics like these serve mainly to put managers on notice of a general problem. The important issue is the demographic risk your own firm faces. As employees get older and retire, businesses can face significant losses of critical knowledge and skills, as well as decreased productivity. The demographic trend has been exacerbated by the relentless focus on cost reduction that's become the business norm. In their zeal to become lean, organizations continue to have round after round of layoffs—without realizing that in just a few years they may confront severe labor shortages or, if they've shed mostly younger workers, be left with a relatively old workforce. In some cases, a company's ability to conduct business may even be hindered: When people begin retiring in droves, there may be no one left who knows how to operate crucial equipment or manage important customer relationships.

We offer here a systematic approach to analyzing future workforce supply and demand under different growth scenarios and on a job-by-job basis. It enables companies to determine how many employees they are likely to need, which qualifications they should have, and when they will need them. With that information, they can set up a tailored retention, recruitment, and talent management strategy for the job functions at greatest risk of a labor shortage. Such an initiative must be launched long before things reach a crisis stage, because the remedies may need years to take effect. Companies that act early not only will minimize the risk but also will gain an important advantage over their rivals.

The Nature of the Risk

In coming years, corporations will face two categories of demographic risk: risks having to do with retiring employees and risks having to do with aging employees. Both require creative forethought and active management.

Retiring employees. When a worker retires, you lose someone to do a job and the accumulated knowledge and expertise that this person takes out the door with him. If many people are retiring and they're difficult to replace, your organization faces what we call *capacity risk*—a potentially diminished ability to carry out the company's business of making a product or offering a service.

Take RWE, Europe's third-largest energy utility, a company we've worked with on assessing and managing demographic risk. The publicly traded German utility, which in 2006 had annual sales of 44 billion and more than 70,000 employees, restructured several times over the past decade. The power generation and mining division, RWE Power, for example, basically cut its workforce in half between 1992 and today. Until recently, the company was encouraging older workers to leave under large-scale early retirement schemes.

But an analysis of retirement trends and future labor demand at the company—over time horizons of five, 10, and 15 years—revealed that today's workforce surplus would in several years turn into a shortfall in many parts of the business. And the loss of talent due to retirement would occur just as the recruitment of new employees for critical positions at the company became more difficult.

In many developed economies, there already is a mismatch between labor supply and demand. Germany today faces an immediate shortage of qualified engineering graduates. In 2006 the country had a deficit of approximately 48,000 engineers, and that figure is expected to grow significantly in coming years. At the same time, the country has too many unskilled workers: The unemployment rate of unskilled labor is more than six times higher than that of university graduates. Most industrialized countries face similar situations. (Some developing economies also face a skill shortage, at least in certain industries, a problem discussed in the sidebar "When the Problem Is Growth.")

Aging employees. Even before older workers start retiring in large numbers, they can pose distinct management challenges. Of course, age brings experience and wisdom that make employees extremely valuable in all kinds of ways. However, in certain settings, productivity may suffer. For example, older workers may not have the robustness needed in physically demanding manufacturing jobs. They may lack up-to-date skills owing to technological changes. In certain situations, they may become less motivated because they see fewer career opportunities ahead of them. They may also be susceptible to health problems that increase absenteeism or force them into reduced work roles. Thus, although age and experience can make workers more effective in many positions, in certain jobs an aging workforce can create a *productivity risk*.

The importance of effectively addressing demographic changes can be seen at a business like RWE Power. Today, some 20% of the division's workforce is over the age of 50. Projections indicate that this age group will make up more than half the workforce by 2011—and close to 80% by 2018. (See the exhibit "A Looming Challenge.")

Some of the issues raised by an aging workforce may not be immediately evident. For example, several thousand employees work in a three-shift environment at RWE Power, but many won't have the stamina—or their doctors' permission—to work in rotating shifts as they grow older. So RWE Power will have to find not only new positions for the three-shift workers who can't function in their jobs any longer but also replacements for them. Although the problem of finding a

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new job for an employee no longer able to work in a three-shift environment is less likely to arise in the United States, which lacks the job protection laws common in Europe, political or other considerations may create similar constraints.

When calculating both kinds of demographic risk—capacity risk and productivity risk—it's important to use the right metrics. For example, a relatively high average age among employees doesn't necessarily signify a serious risk of losing crucial talent to retirement. The distribution of ages—that is, whether a large percentage of your employees are clustered within a relatively narrow age band—is the real sign that you'll encounter this problem. If a skewed distribution in the age structure does exist, however, the average age of employees will let you know *when* you'll face it.

Assessing the Risk

Capacity risk and productivity risk are assessed differently. In the case of capacity risk, you determine the gap between your organization's future demand for workers and anticipated workforce levels, and then figure out how difficult it will be to close that gap by hiring from outside the company. In the case of productivity risk, you determine how many workers will fall into older age cohorts in coming years and what implications that will have.

Calculating the risks at a companywide level doesn't provide an accurate picture of

the problem. Drilling down to the level of individual locations or business units is more useful. But in the end you need to figure out how age trends will affect three different categories of jobs: relatively broad *job groups*, narrower *job families* within each of those groups, and more specific *job functions* within each of the families.

Bringing the analysis down to these levels will almost certainly reveal an anticipated surplus of people in certain job groups, families, and functions and a shortfall in others. Managing the risk will require addressing the problem at these levels as well. Indeed, using uniform remedies across an entire company would be ineffective and probably counterproductive, especially for productivity risk, which varies significantly by job category.

Let's look at what's involved in this progressively granular analysis, focusing in detail on the problem of retiring workers and capacity risk.

Run a quick check to identify where potential challenges lie. The first step is to do a relatively simple analysis of your company's situation, one that draws on easily available company data. The aim is to determine, by location and business unit, future workforce levels and age distribution, based on anticipated retirement and attrition rates. Much of the information—for example, the number of employees and their respective ages—can be pulled from existing HR data systems and fed into a simple simulation tool that forecasts what will happen under a number of scenarios over the next five to 15 years. Historical data on such things as attrition and recruiting can be used to generate projections, but these need to be enriched with management discussions of future trends. RWE Power's historic annual attrition rate of less than 1%, for instance, could rise as demand for specialized workers grows in the labor market.

This first analytical cut quickly provides a good idea of which locations and business units are likely to have the steepest age distribution and most dramatic capacity losses. In units or locations with the highest problems, companies can then do a more detailed analysis.

Create a job taxonomy to refine your assessment. You'll need to continue the analysis at the level of the three job categories: groups, families, and functions. Employees

When the Problem Is Growth

As veterans of "talent wars" know, rapid growth can create labor shortages. In India, for example, where labor is thought to be plentiful and the workforce is relatively young, we're already seeing early signs of severe scarcities of workers in certain specialized jobs. Our approach to demographic risk—systematically assessing and managing the risk by job function—can also be used in industries or countries where economic growth threatens to outstrip growth in the workforce.

Take the example of an Eastern European bank that was losing workers not

to retirement but to attrition, as competitors fought to attract talent in an industry that was burgeoning while capitalism took hold in the formerly Communist market. By analyzing future workforce supply and demand under different growth scenarios and on a job-by-job basis, the bank determined how many employees it was likely to need, what qualifications they should have, and when it would need them. With that information, the bank set up a tailored retention, recruitment, and talent management strategy for the job functions at greatest risk of a labor shortage.

within each category share similar skills and can transfer within them, but the amount of time it takes to successfully transition to a new job varies with each category.

Within a job function, employees can get up to speed in new positions in less than three months, with relatively little training. Within a job family, it takes employees changing roles less than 18 months to acquire the necessary skills. Within a job group, a transfer may require up to 36 months and significant training.

RWE Power held workshops at which operational managers categorized jobs based on this notion of exchangeability. Then the

job function, family, and group that each employee belonged to were entered in the company's employee data system. (The exhibit "Creating a Job Taxonomy for Your Company" shows how certain jobs might be classified.)

Categorizing employees based on their skills and the exchangeability of those skills is crucial to the systematic evaluation and management of demographic risk. That's because the more time it takes to train someone to do another job, the more it will cost to prevent a shortage of workers as people retire.

Pinpoint potential capacity problems. Having developed this taxonomy of job categories, you can begin identifying what your organization's greatest capacity challenges will be as workers retire. (The exhibit "Where Will You Face Talent Gaps?" lays out a multistep approach to assessing your capacity risk.)

Start by estimating future workforce supply—that is, how many available workers you will have for each particular job function over the next five to 15 years. You can calculate these anticipated workforce levels by extending to individual jobs the analysis of retirement and historical attrition rates you did in the demographic quick check at the division and location level.

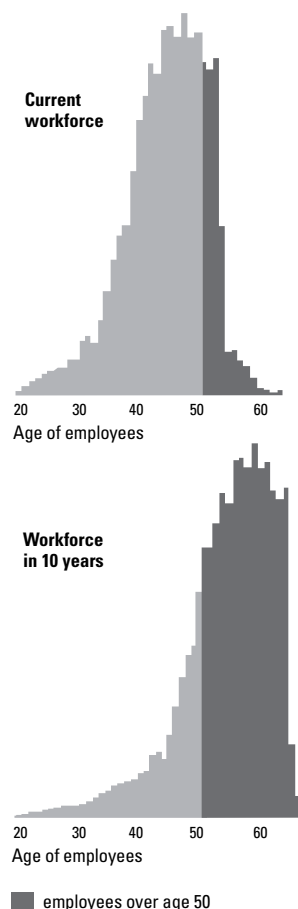
Then calculate future workforce demand for each job function by identifying what within your strategy will drive personnel requirements, again taking into account various scenarios. At RWE Power, the demand for staff is tied both to anticipated growth—for example, when planned power plants will come on line—and to productivity gains. In more volatile industries, like auto manufacturing or banking, forecasting future staff needs by job function is more challenging, requiring the development of an array of scenarios. But an assessment of even worst-case growth scenarios in these industries will inevitably reveal the need for immediate action in certain job functions.

Combining these estimates of future workforce supply and demand allows you to determine your internal capacity risk. For each job function, you should be able to tell both the extent of the risk (the size of a potential shortfall—or, in some cases, a surplus) and its immediacy (if a shortfall will happen, when it is likely to occur.)

Using your categorization of jobs by functions, families, and groups, you'll be able to

A Looming Challenge

An aging workforce will have implications for most developed economies, but managers need to examine the particular effect it will have on their own companies by looking at the age distribution of their employee base. When RWE Power, the power generation and mining division of a European utility, examined the demographics of its workforce, it saw that if current trends continued, in 10 years a large percentage of its workers would be at or near retirement.



see how difficult it will be to replace retiring workers with someone else from within the company. A serious internal capacity risk exists when there will be a significant shortfall in the workers required for key job functions in the short to medium term.

The analysis should also take into account that specialized jobs may require a lengthy training and certification period. In Germany, for example, it takes a three-year apprenticeship to become an electrician. Then it can require another two years to specialize as a maintenance expert, and two more to become

an electrical master technician. So a company needs to identify a shortfall in electrical master technicians seven years before it occurs, especially if it will be difficult to fill those jobs with outside hires. In addition, depending on the degree of off-the-job training required, it might be necessary to have a *surplus* of workers for the jobs at each of these stages so that some can receive the training needed to advance to the next level before the actual gap occurs. A traditional three-year planning cycle won't identify those risks in time to respond to them.

Creating a Job Taxonomy for Your Company

Companies can mitigate critical worker shortages by transferring employees into open jobs. So the first step in assessing demographic risk is to evaluate how easily you can shift employees among positions. You can do this by categorizing jobs in the company on three levels: functions, families, and groups.

Job functions comprise jobs that are essentially the same, but in different locations, or similar enough to require the same sets of skills. In the hypothetical example below, all system controllers are in the same job function because they all have detailed knowledge about the operation of power-plant control systems. Workers transferring within a func-

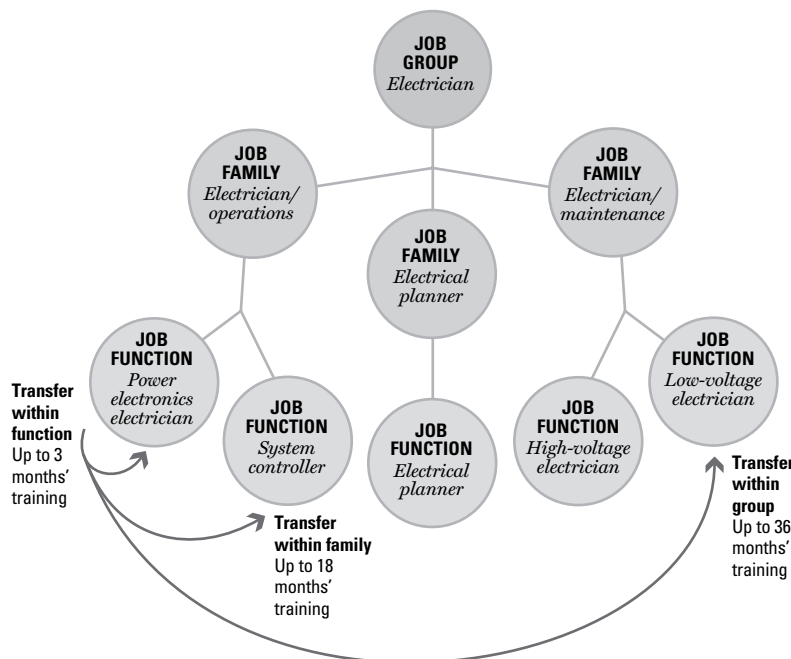
tion can get up to speed in less than three months, with relatively little training.

Job functions that require closely related but somewhat different knowledge and skills belong to the same *job family*. Here, system controllers and power electronics electricians are in the same family because both are skilled electricians who have deep knowledge about operational processes but who work on different electronic systems. Employees can successfully transition to new roles within a family in less than 18 months, with the right training.

Similar job families are part of the same *job group*. This illustrative chart shows that system controllers and electrical planners be-

long to the electrician job group. Shifting from system controller to electrical planner, however, would require an employee to learn new planning processes, planning standards, and planning software. Workers transferring to new positions outside their job family but within their job group require up to 36 months of training.

If you enter each employee's job function, family, and group in your employee database, you can easily identify transfers that could eliminate future labor shortfalls in particular jobs—and determine how long it would take to provide the training needed for employees to make the switch.

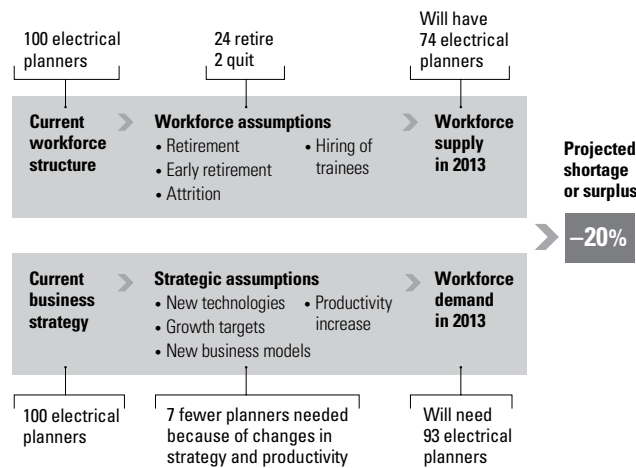


Where Will You Face Talent Gaps?

To identify where your greatest challenges will lie as workers retire or leave, you need to forecast what your workforce needs will be in each job function—or, as a first cut, in each job family—at different points in the future. This forecast requires two inputs: internal workforce supply (that is, your company’s anticipated workforce levels, given assumptions about retirement age, early retirement programs, and attrition rates) and workforce demand (based on strategic assumptions about such things as growth targets, emerging business models, productivity increases, and new technologies).

These forecasts—which can range in sophistication from back-of-the-envelope approximations to numbers produced by computer simulation of different scenarios—will yield estimates of anticipated internal shortfalls (or surpluses) in each job function over time.

The chart below shows a relatively simple five-year forecast for one job function, electrical planner.



To get a read on your overall internal capacity risk, determine for each function the extent of the risk (that is, the size of a potential shortfall over time) and the immediacy of the risk (how soon you are likely to face a serious problem). Note that here internal capacity risk will be particularly acute in the case of the system controllers, high-voltage electricians, and electrical planners, who will be in seriously short supply in a few years.

Job functions	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Power electronics electrician	-4%	-2%	0%	4%	9%	15%	13%	-1%	-3%	8%	20%	17%	18%
System controller	-5%	-8%	-12%	-18%	-22%	-30%	-35%	-45%	-45%	-47%	-51%	-58%	-62%
Electrical planner	-6%	-13%	-14%	-25%	-23%	-20%	-19%	-18%	-20%	-22%	-25%	-28%	-32%
High-voltage electrician	-1%	-10%	14%	13%	-7%	-29%	-29%	-43%	-45%	-75%	-81%	-85%	-92%
Low-voltage electrician	-1%	-3%	1%	2%	-1%	9%	21%	24%	27%	29%	32%	35%	38%

Keep in mind that companies may face a shortfall not simply of workers with needed skills but of employees with crucial experience and knowledge—particularly specialized knowledge about the company and its practices. (To learn how U.S. truck maker Freightliner addressed this risk, see the sidebar “Safeguarding Knowledge.”)

The difficulty of closing a gap depends on the availability of workers with the skills you need in the labor market. Consequently, after determining your internal capacity risk, you should assess the external labor market risk, again by job family and function. The extent of the risk will be determined by the availability of qualified workers and by the competition from other companies to hire them.

The final step in determining capacity risk involves combining the assessments of your internal situation and of the external labor market, to highlight which job functions will pose the greatest threat. When it analyzed its workforce trends, RWE Power found that it would face a shortage within the company of certain kinds of highly specialized engineers, that relatively few of these engineers would be entering the job market in coming years, and that competition to hire them would be fierce among the few large utility companies—creating a capacity challenge for this job function.

Pinpoint potential productivity losses.

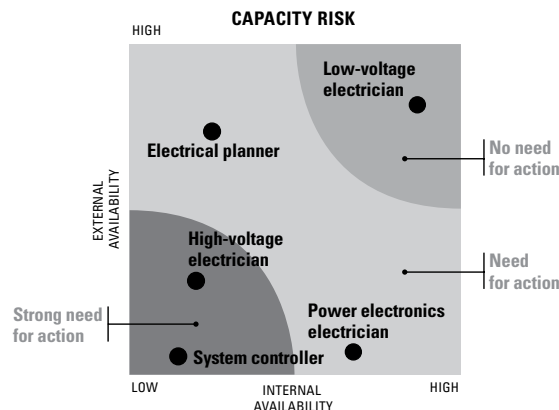
A similar approach, if a somewhat more straightforward process, is used to gauge the risk of lower productivity and other costs—such as absenteeism and retraining costs—that can be related to an aging workforce in certain job categories. Again, the risk must be assessed at the level of job group, family, and function, a process that begins with looking at the age distribution of employees in each category and how it will change over time.

Then you’ll need to determine which job functions are at risk—because of employees’ ages *and* because of the nature of the work—for age-related productivity losses. At the least, you’ll want to differentiate between physically demanding jobs, in which aging can lead to reduced productivity, and experience-based jobs, in which aging can lead to higher productivity. Keep in mind that the implications of employee aging will vary widely from job to job. Companies need to understand those differences and develop specific strategies for each job group.

The process of assessing your company’s capacity and productivity risks by location, business unit, and job category can reveal some daunting challenges—say, a serious shortage of talent in an area targeted for growth. The key is to identify such a problem far enough in advance to be able to address

Next, assess the external marketplace risk, to see how difficult it will be to alleviate shortfalls by hiring people from outside the company when your need for people is greatest. You should take into account both the availability of workers with the requisite skills and the intensity of competition to hire those workers.

Combining your analyses of your internal situation and the labor market will highlight the job functions facing the greatest threat (here, system controller and high-voltage electrician) and those that give little cause for concern (low-voltage electrician). While there will be an internal shortage of electrical planners, those workers are expected to be in plentiful supply in the labor market.



it and, in doing so, gain an advantage over your competitors.

Managing the Risk

With detailed information about the demographic risk you face, you're in a position to systematically employ an array of measures to manage both capacity risk and productivity risk.

Take steps now to prevent talent shortages. Future shortfalls in a critical job family or function, when spotted early enough, can be mitigated in two basic ways: by reducing the demand for workers in those jobs and by increasing the supply of people able to perform them. We'll look at six methods for closing the gap between workforce supply and demand, beginning with two aimed at reducing workforce requirements. (See the sidebar "Six Ways to Close the Talent Gap.")

An obvious but potentially overlooked method is *productivity improvement*, achieved through process enhancements, for instance, or technical innovations. Most companies constantly seek to improve productivity. But the potential for a serious labor shortage in a particular job family or function can focus those efforts.

Companies can also prioritize *outsourcing* in job categories in which a labor shortage is looming—particularly if the shortage looks temporary or if it involves work that is of limited strategic importance. Bear in mind, however, that if you have problems recruiting in certain job categories, your outsourcer probably faces the same constraints, so outsourcing may provide only a partial solution.

Maintaining an adequate supply of talent is another key to managing potential gaps. Companies that have categorized their jobs by functions, families, and groups will have a good read on the feasibility of *job transfers*. They can tap a surplus in a job function or family at one location or business unit to fill a gap in the same function or family at another location or business unit—provided they've laid the necessary groundwork for transfers. RWE Power is considering how it can help workers prepare for a potential transfer to a similar but different job or to the same job at a different power plant as the organization's production strategy changes.

Training programs play a key role in such preparations. The capacity risk analysis enabled RWE Power to spot, for instance, cross-training opportunities between its different operations: After a short learning period, a high-voltage electrician working on large mining equipment can undertake high-voltage tasks at a power plant, and vice versa. The ability to map the potential for transfers and training across job categories, business units, and locations gives RWE Power a capability most large companies lack. (See the exhibit "Sizing Up Your Transfer and Training Options" for a simple illustration of how training and transfers can be combined to address gaps.)

To ensure that attrition doesn't exacerbate a capacity shortfall, it is important to create sophisticated *retention* programs targeted at people in job functions at greatest risk of a talent shortage. Initiatives include training, career planning programs, and job rotation

Safeguarding Knowledge

Retirement represents the loss of a worker with the skills needed to perform a specific job. It may also represent the loss of crucial knowledge whose value to the organization extends far beyond the worker's individual position.

Freightliner, a large truck manufacturer based in Portland, Oregon, has anticipated this dual risk. The company (a division of Daimler that recently changed its name to Daimler Trucks North America) saw that the imminent retirement of a large cohort of its aging workforce threatened the specialized technical skills and deep knowledge of customer needs required to produce the highly customized trucks it was known for. Previously, significant layoffs, voluntary severance programs, and limited external recruiting had resulted in a relatively old workforce. In certain functions 30% to 50% of Freightliner's workforce would be eligible for retirement by 2010. The cyclical nature of its business made the staffing equation even more difficult.

Once Freightliner recognized it faced a serious potential problem, it set about

assessing the extent and severity of the risk, focusing on employees who were key knowledge holders. The challenge was to identify these workers as a subset of the workforce; to segment them based on whether their knowledge was held by them alone, by a few employees, or by many employees; and to transfer their knowledge so that it wouldn't be lost to the organization when they retired.

Using an in-depth survey of 5,000 employees, Freightliner classified employees by the type of knowledge they had. Across the company, about 20% of the population emerged as "key knowledge holders," 9% as "unique key knowledge holders," and 3% as "at-risk, unique key knowledge holders" (those who were eligible to retire within five years). The risk posed by the departure of this latter group varied significantly among different functions. Segmenting this crucial human resource by function helped the company set up targeted knowledge management systems, tandem staffing arrangements, job rotations, and other means to capture what these people knew before they left the company.

programs, as well as more conventional long-term incentives. At the minimum, you need to monitor employee satisfaction and strive to increase it in job categories facing a serious capacity risk. RWE Power, for example, has carefully analyzed its remuneration structure for certain types of engineers.

Finally, having taken steps to minimize workforce demand in crucial job categories and to strengthen the supply of workers from within the company, you must look outside the organization for workers to fill any remaining gap. For many companies, this fundamental business activity—*recruitment*—has been a low priority during the relentless downsizing of recent years. But because of the major demographic shift now occurring, developing sophisticated recruiting programs—that focus not just on hiring more people but on such things as the careful positioning of the company brand with prospective employees—are a top priority.

Companies must learn to target their recruiting efforts by, for example, identifying specialized schools that will turn out workers with the skills required for jobs in at-risk categories. They need to think ahead, beginning to recruit employees whose skills may not be in demand today but will be tomorrow, when shortages emerge. Companies that anticipate their future needs and act now will gain a clear competitive advantage over rivals that are still focused on reducing head count.

This will require a radical change in mindset for companies that have been in a prolonged downsizing mode. For RWE Power, it became clear that, while it had the financial capital to construct new power plants, human capital, in the form of specialized engineers, was the scarce resource. Consequently, the company launched an intense effort to close the gap in the short term—with, for example, focused recruiting drives at certain universities—and developed a long-term recruitment strategy for these positions. Other possible responses to such a gap include reactivating retirees or acquiring small companies that have the sought-after talent.

Ensure that aging workers remain assets. Initiatives focused on the needs of older workers can help address the implications an aging workforce has for productivity. A systematic review of current HR policies and processes will reveal adjustments you

can make in a variety of areas to turn age-related risks into competitive opportunities. The key is to tailor these measures to each job function or family, keeping in mind that the experience that comes with age may increase productivity in certain jobs, such as engineering or sales positions.

The most obvious moves involve *training programs* that help older workers update their skills and leverage their experience. At RWE Power, the operational technology at power plants has changed significantly since older workers began at the company, and continuing professional development programs are crucial in maintaining these workers' production knowledge. A danger is that older workers will be placed in one-age-fits-all courses that aren't geared to their particular needs, knowledge, and strengths. For example, older manufacturing employees' lack of familiarity with the internet may make typical web-based training programs unappealing to them. Training older employees in mixed-age groups can also reduce the value of such programs: They may be embarrassed to ask questions that younger employees might scoff at. (It should be noted that the reverse may also be true.)

Another obvious area for productivity enhancement is *health care management*. On average, older employees don't become ill more often than younger employees, they just are ill for longer periods. Proactive measures, designed to prevent sickness and injury, can reduce the problem significantly. Such measures should be targeted at employees with a high risk of health problems and tailored to the jobs they do. They also need to include incentives to encourage participation—say, the offer of additional vacation days to employees who regularly engage in exercise, which has been shown to reduce illness-related absences among older workers.

In many cases, *workplace accommodations* designed to help older workers on the job can increase productivity. With manual work, companies may focus on enhancing workplace design or revising employees' duties—say, by rotating them during the course of a day among tasks that are more and less physically demanding. RWE Power, which has found that aging could reduce productivity in production-related job families, is exploring the possibility of personalized work

Six Ways to Close the Talent Gap

Having identified where you are likely to face the greatest capacity risk, you need to take steps to minimize it, particularly in positions critical to the organization's future success. This can be done by job category, using a combination of measures. They fall into two general categories:

Reduce your future demand for labor

- increase productivity
- outsource work

Increase your future supply of qualified workers

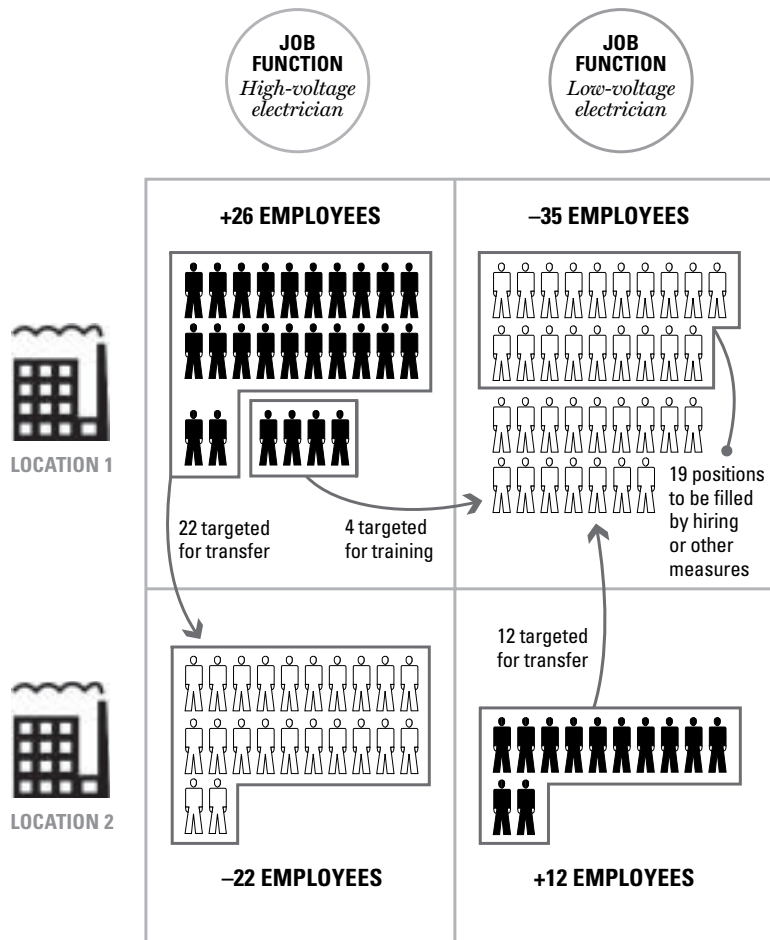
- transfer employees
- train employees
- increase employee retention
- recruit more workers

Sizing Up Your Transfer and Training Options

If you anticipate a shortfall in one job function at one location in a given year (in this simplified example, the deficit of 35 low-voltage electricians at Location 1), you might be able to alleviate that problem by training people from another job function, in the same job family and at the same location, in which there will be an oversupply (the surplus of 26 high-voltage electricians in Location 1). Although their training might take up to 18 months, you could begin it before the shortfall materializes, because you have spotted the problem early.

Alternatively, if you have identified a surplus of workers in the same job function at another location (the surplus of 12 low-voltage technicians at Location 2), you could transfer some of them to fill the shortage.

As we see here, the shortfall of low-voltage electricians at Location 1 and the shortfall of high-voltage electricians at Location 2 would be eased through a combination of training and transfers—though there would still be a deficit of 19 workers. That would have to be addressed through other measures, including hiring from outside the company.



Retirees with critical knowledge might be offered the chance to return to the company and work on special projects.

schedules, with shift lengths tailored to employees' abilities, and of "lifetime working programs," in which employees can accumulate early in their careers credit for overtime hours that can be used to reduce work hours when they are older.

In a twist on the outsourcing that accompanies most downsizing initiatives, companies might also consider the strategic "insourcing" of certain jobs as a way to accommodate the abilities of older workers. That is, less physically demanding tasks currently performed by outside contractors could be brought back into the company and assigned to older workers who are guaranteed employment by their contract or by job protection laws but may no longer perform well in their current positions.

Initiatives may also involve developing new *compensation structures*. The traditional link between pay and length of service (and hence age) may need to be loosened, and compensation—for certain activities, at least—more closely linked to performance. Although under such a system, some older workers may be compensated less than they would have been under the existing system, note again that, in many job categories, knowledge and experience may in fact lead to superior performance and higher pay.

While some older workers become more engaged with their jobs (say, after their children have left home and their domestic responsibilities lessen), others become less motivated because they perceive they have fewer career opportunities. To counter a potential loss of motivation as workers approach retirement, companies can try creative age-related *performance incentives*. For example, older workers might serve as mentors to new workers, which can increase motivation and performance. Employees with critical knowledge might be offered the chance to return to the company and work on special

projects on a freelance basis after they've retired. This latter approach has multiple benefits: reducing capacity shortfalls in a crucial job category and keeping valuable knowledge in the company, as well as motivating employees near retirement to perform well so that they will be considered for this post-retirement opportunity.

Addressing Tomorrow's Problem Today

The demographic shift looming on the horizon will radically reshape our workforces. As its impact becomes more obvious, many companies will realize that they must undertake a monumental, multiyear change-management program—one that represents an opportunity as well as a response to a significant challenge.

As we've noted, actively addressing demographic risk to retain the skills and know-how needed to ensure future viability can give companies a competitive advantage over rivals. That means demographic risk management must be an integral part of yearly strategy setting. Furthermore, because demographic risk management is not a onetime initiative but an ongoing part of strategy and risk discussions, the HR department will need to become a true strategic partner of top management—a role that HR should have assumed long ago, in any case.

There is no time to waste: Recall the seven-year lead required to train the German master electrical technician. Companies must adopt a demographic risk management approach now—before their competitors do and before it is too late to effectively respond to the changes that lie ahead.

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Managing Demographic Risk

Further Reading

ARTICLE

[The Cane Mutiny: Managing a Graying Workforce](#)

by Cornelia Geissler
Harvard Business Review
October 2005
Product no. R0510A

This fictional case study explores “productivity risk” in aging workers. At a pharmaceutical company worried about imminent retirements of over-65 employees, problems are also cropping up in workers close to retirement. For example, one 58-year-old account manager, angry about being forced to resume full-time hours and report to a “jargon-happy tyke,” has been taking numerous sick days and otherwise disengaging from his job. The head of HR worries that other similarly aged employees will stage unofficial “strikes” as well. He wonders how the company can best manage the demographic shift. Expert commentators offer advice. Their recommendations include alerting the executive team to the full effects of this shift (in terms of cost, performance, and innovation), transferring older workers to less-demanding roles, and keeping aging workers engaged by allowing them to ease into part-time work schedules.

BOOK

[Workforce Crisis: How to Beat the Coming Shortage of Skills and Talent](#)

by Ken Dychtwald, Robert Morison, and Tamara J. Erickson
Harvard Business School Press
April 2006
Product no. 5215

Unprecedented shifts in the age distribution and diversity of the global labor pool are under way. The authors confirm that within the decade, as the massive boomer generation begins to retire and fewer skilled workers are available to replace them, companies in industrialized markets will face a labor shortage and brain drain of dramatic proportions. They argue that companies ignore these shifts at great peril. Survival will depend on redefining retirement and transforming management and human resources practices to attract, accommodate, and retain workers of all ages and backgrounds. Based on decades of research, the authors present strategies for leveraging mature workers’ knowledge, re-engaging disillusioned midcareer workers, and attracting and retaining talented younger workers.

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