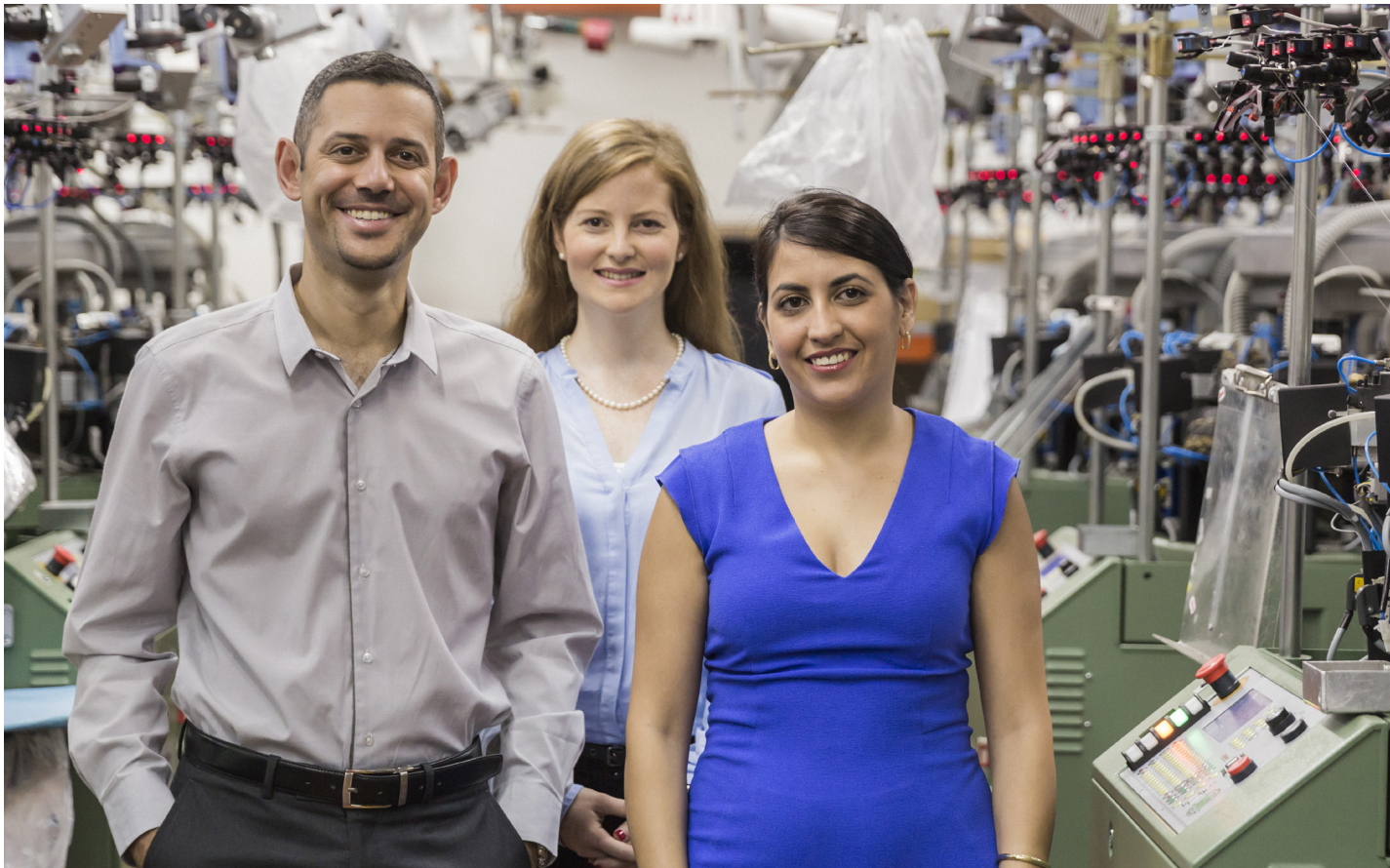

Talent management in manufacturing: The need for a fresh approach



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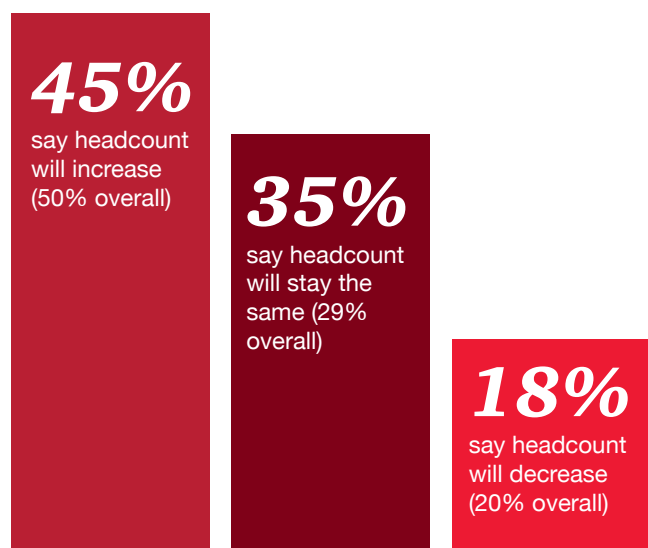
Industrial manufacturing companies are having difficulty filling jobs, even with relatively high unemployment rates in many countries. The problem is getting the right people for the available jobs. There is increasing competition for talent—and manufacturing is not always viewed as offering the most attractive career prospects. For some, the memory of industry layoffs and worker concessions during the economic downturn have eroded loyalty and tarnished the view of manufacturing as a relatively safe place to build a career.¹ For young people, manufacturing holds no cache. It is not regarded as a place to build a professional career. Even now, with manufacturing once again growing and profitable, the industry is not drawing the talent it needs to support growth.

Many manufacturing executives are aware of this challenge. Nearly half of the manufacturing CEOs in the 17th Annual Global PwC CEO Survey² say they are worried about the availability of key skills. They clearly recognize the importance of talent strategies in moving their business forward, with two-thirds saying that creating a skilled workforce is a priority for their companies. And nearly half of manufacturing CEOs say they plan to add staff this year.

1. *Industry Week*, “How Manufacturing Can Solve Its Own Talent Shortage Crisis,” 2014-08-21

2. PwC’s 17th Annual Global CEO Survey—key findings in the industrial manufacturing industry , 2014-02

Figure 1: Nearly half of industrial manufacturing CEOs plan to add staff this year



Only 32 percent have implemented policies to attract or retain needed talent.³ This disconnect between aspiration and action is likely to cause a further gap in the future, unless companies take steps to reassess their human resource (HR) policies and make them more effective.

The art of talent management is focused on attracting and retaining the best people. It looks at whether a business has the right people to deliver, both in terms of quality as well as quantity. It looks at the key talent pool and determines which skills exist internally and what other skills are needed, now and in the future. This is by no means a simple task; and most CEOs do not believe their HR departments are well prepared to deal with the challenge.⁴

Companies know they must meet certain basic requirements in terms of pay, benefits, job security, and advancement opportunities. But, increasingly, this is not enough. Management needs to ensure that employees, especially top talent, are engaged and motivated to perform at a high level and that they have the tools they need to be successful. Management also needs to address the changing expectations of employees, particularly those in the millennial generation that are starting to enter the workforce. The industry needs to develop a value proposition for employees as compelling as the one it provides for customers.

The megatrend effect on the growing skills gap

The skills gap in manufacturing is getting larger in part because of external forces, or megatrends, that are creating a greater need for skilled labor. Advancements in technology not only require new employee skills, they shorten the shelf life of those skills and increase the need for continuous training. Adding to this complexity is that demographic changes across the globe make it more difficult to find and retain the workforce of tomorrow.

Advances in technology

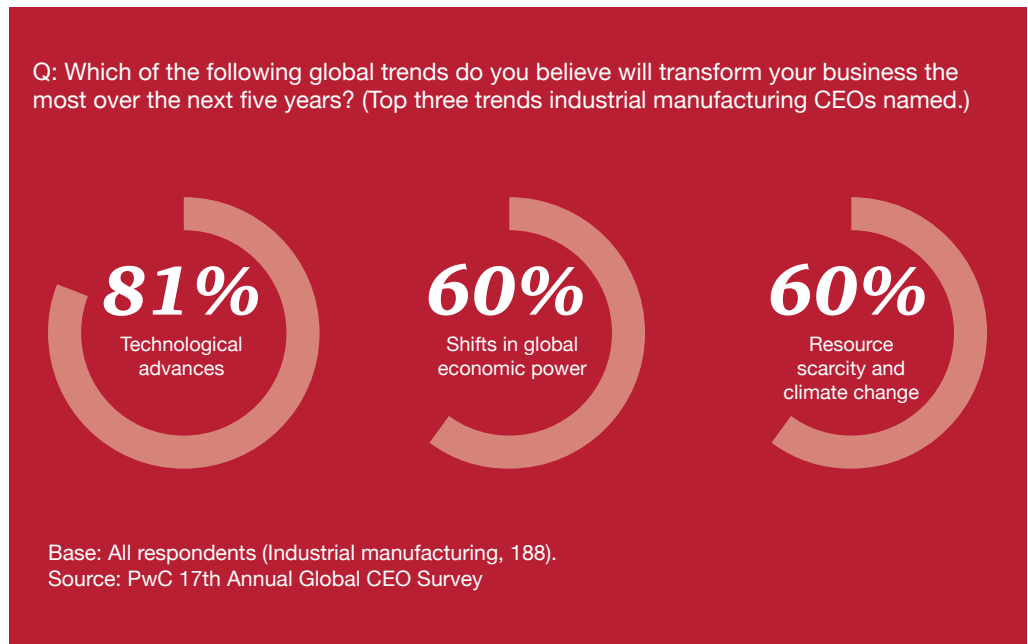
Technology is driving manufacturing breakthroughs across all manufacturing sectors. It is enabling companies to reduce inventories, create more efficient supply chains, customize products, and reduce R&D costs and time to market. It is no wonder that CEOs see technological advances as the megatrend most significantly affecting their business over the next five years.⁵

3. PwC's 17th Annual Global CEO Survey—key findings in the industrial manufacturing industry, 2013

4. PwC's 17th Annual Global CEO Survey—key findings in the industrial manufacturing industry, 2013

5. PwC's 17th Annual Global CEO Survey—key findings in the industrial manufacturing industry, 2013

Figure 2: The importance of technology trends



Robots have had a dramatic impact on the factory floor, and other game-changing technologies are on the horizon. New, computer-based manufacturing techniques such as 3D printing and precision machining are becoming less expensive and more adaptable to manufacturing uses. As these techniques evolve, there will be increasing opportunities for adoption into additional areas of manufacturing.

To support new technologies and innovation, manufacturers have to attract people with STEM (science, technology, engineering, and mathematics) skills. However, this talent pool is in demand in many other industries as well, and manufacturing is not top-of-mind for young people starting to build their careers.

Shifts in global demographics and urbanization

Many mature economies, such as the US and Japan, are dealing with aging populations and baby boomer retirements, leaving a significant vacuum in the workforce. If manufacturers are to retain many valuable workplace skills and institutional knowledge, they will have to create a systematic way to ensure a smooth handoff from one generation to another.

Emerging economies, with rapidly growing young populations, present different skill challenges for manufacturers. Many of these countries are still struggling with feeding and educating their people. These issues become magnified as rural populations move into cities in search of work. A rapid rise in urbanization in relatively undeveloped countries often leads to increased poverty and high dropout rates,⁶ resulting in a scarcity of talent. This scarcity breeds competition among companies that have to compete more aggressively for the talent that does exist, especially at the managerial level. As a result, companies are finding it difficult to attract and retain employees, often losing them to competitors that offer even small increases in pay or slightly more favorable working conditions. This high rate of mobility is likely to become a bigger problem over the next decade as competition for labor continues to increase.⁷

6. World Economic Forum, "Matching Skills and Labour Market Needs," 2014-02-03

7. PwC, 17th Annual Global CEO Survey

Strategies for closing the skills gap

A central task for talent management in manufacturing is to help fill the jobs needed to support today's needs and future goals. This is a significant challenge for manufacturers because they have a harder time filling vacancies than other companies, especially for jobs requiring STEM-related skills.⁸ And, yet, as is true in many industries, innovation is an increasingly important engine of growth—for new product development, improved processes, and new business models and supply chains. Innovation requires investments in technology and people, especially in the information technology and research and development arenas. While manufacturers are starting to gear up for these tasks, they still have a long way to go. And they need the talent to get there—a fact widely recognized by manufacturing CEOs themselves.⁹

Figure 3: Talent leads the list of innovation challenges for industrial manufacturing executives

How challenging do you find the following aspects of making innovation happen within your company? Respondents who said 'very' or 'somewhat' challenging



Source: PwC, *Global Innovation Survey 2013: industrial manufacturing perspective*
Base: Industrial manufacturing, 249

Expand your talent search

Manufacturers cannot afford to wait until people finish school to compete for their talent. Some companies know this; they are already doing considerable outreach to schools at the high school and college levels. By connecting with students while they are still in school, companies can help to change negative perceptions of manufacturing. Also, through academic contacts, manufacturers can identify talent before students enter the workforce and help build a positive image of their companies as a desirable place to work.

Another way to identify talent, and create goodwill, is to sponsor talented students while they are still in school. ABB, based in Switzerland, has instituted a program for engineering students that provides global scholarships to students “who can prove a high standard of academic achievement and who need financial support to be able to continue their studies.”¹⁰ To date, ABB has sponsored more than 30 students, who are invited to visit the firm's research facility and work together in teams on a technical presentation. While not all students are offered jobs, this is an excellent way to foster top talent.

8. *Industry Week*, “STEM Shortage is Most Acute for Manufacturers,” 2014-08-05

9. PwC, *Global Innovation Survey 2013: Industrial manufacturing perspectives*

10. ABB Jurgen Dormann Foundation Fact Sheet

In addition to seeking out graduates at brick-and-mortar institutions, manufacturers should consider students studying online or taking MOOCs (massive open online courses). MOOCs have greatly expanded over the last several years and can be useful not only for identifying employee prospects, but also as a way to provide for the continuous education of employees.

Most manufacturers already use online recruiting sites and monitor social media for potential candidates. But companies can be more proactive and inventive in using media. For example, they could create a proprietary online forum to discuss business and career issues and invite select participants to join. This approach not only provides a mechanism for identifying prospects, including those who are not actively looking for a job, but it is also a way to control messaging and branding.



In some cases, it may make sense to use an external resource to solve a particular problem or work on a special project, particularly when the talent needed is not available in the firm. Some companies have created a formal working relationship with an external outsourcing firm. Another model that is becoming increasingly popular is crowdsourcing, which is using a Web-based platform to draw global talent to work on a problem or product.

Offer ongoing training and development programs

While it is reasonable to expect that graduates have a certain level of literacy and computational skills, they may not have the training to fill a particular job. While basic skills may be developed at school, they can only be honed with practical experience and on-the-job training. When hiring, companies need to take into account not only current skills, but the ability to learn and evolve in today's fast changing conditions. The role of companies in helping employees develop and maintain needed skills through continuous training programs is particularly important in an age of rapid technological change.¹²

11. www.pwc.com/talentmanagement

12. World Economic Forum, "Matching Skills and Labour Market Needs," 2014-02-03

In addition to formal training, manufacturers should consider internship and apprenticeship programs. These serve to bring in new people, train them for particular skills or in specific jobs, and introduce them to the company culture. These programs also provide a way for companies to evaluate “soft skills,” such as the ability to communicate and work collaboratively.

As the baby boomer generation leaves the workforce, valuable skills are going with them. One solution is to establish cross-generational mentorship programs. These programs can be particularly effective in training people for jobs with a steep learning curve that require lots of experience and particular skill-sets.

Workers in the European Union are retiring prematurely because of current laws and conventions. This is not a sustainable model, especially in countries with aging populations.

—Peter de Bley, PwC Global Human Resource Management Consulting Leader

Re-evaluate your employee value proposition

To attract and retain talent, manufacturing CEOs must look to meet employee needs—and be able to change with those needs. Companies have to create an environment that is challenging, engaging, and offers opportunities for advancement. Manufacturers today need to be more flexible in terms of worker mobility and other working conditions. Online sites have opened people’s eyes. There is a lot of access to information and people are more aware of the possibilities, but many companies are not adjusting fast enough.

Geography matters as well; people are less likely to change jobs if they work in a desirable community that can provide a good life outside of work. So, as the global war for talent advances, manufacturers will need to consider where to place their factories, R&D centers, and distribution facilities in order to attract the right people.

As the millennial generation enters the workforce, manufacturers will have to appeal to their particular wants and needs. By 2020, millennials are expected to form 50 percent of the global workforce, and they will have substantial clout in re-fashioning the work experience. They have much greater knowledge about working conditions globally and across industries, thanks to computers and social media, which has influenced their priorities and expectations. They are interested in travel and mobility and want rapid career advancement. They are more entrepreneurial than prior generations and more apt to pave their own way. They are more comfortable communicating with others through Web-based tools and expect employers to provide them with the latest tools and technology.¹³

Millennials also value a better work/life balance and flexible working arrangements. In a strong economy, they will change jobs to achieve their goals of personal development and career advancement. They aspire to work for a company whose brand they can be proud of—and that includes taking socially responsible positions.¹⁴ Given these characteristics, the value proposition for attracting millennials is clear: provide “freedom, flexibility, and entrepreneurialism.”¹⁵

13. PwC, “Millennials at work,” 2012

14. PwC, “Millennials at work,” 2012

15. *Industry Week*, “How manufacturing Can Solve Its Own Talent Shortage Crisis,” 2014-08-21



One global manufacturing client changed its recruiting model so recruiters are focused on filling certain job functions. By becoming specialists, recruiters can better understand and recognize the aptitudes and skills needed to be successful.

In addition to generational considerations, companies have to tailor the employee value proposition to the local culture—thinking “glocal.” While employees are much more aware of standards in other countries, they are also the product of the values and standards of their native country. So, although manufacturers have to achieve consistency in their global brand, they must also be cognizant of the particular attributes that will attract and retain local talent.

Upgrade your talent function

Most manufacturing CEOs in our global survey said they do not have confidence in their HR departments.¹⁶ Given the industry’s need for talent, this is a serious problem. While HR has not been viewed as a core process or part of the C-suite at most manufacturing companies, in this time of talent scarcity some companies are upscaling the function.

Many HR employees are generalists, responsible for all HR-related tasks from compensation to recruiting. For global companies, with significant talent needs, generalists may not be able to focus adequately on finding and retaining the right people. At General Electric, for example, the roles of HR and Talent have been split, and each has its own global head accountable for fulfilling the group’s objectives. This structure allows talent professionals to focus on sourcing, recruiting, and retaining people as well as ensuring the best talent is available for key, strategic projects.

A professional HR department understands the processes that must be put in place to foster accountability and engagement. These processes include aligning the goals of the organization and its employees, evaluating performance against goals on an ongoing basis, identifying and providing necessary training for success, and compensating employees for meeting goals.¹⁷ Processes must be well-defined, transparent, and measurable.

HR/Talent, whether integrated or separate functions, must effectively support a company’s business strategy. Given the increasing importance of talent, HR/Talent heads need to be part of the executive leadership team and report regularly on their performance benchmarked against departmental goals and organizational strategy.

16. PwC’s 17th Annual Global CEO Survey—key findings in the industrial manufacturing industry, 2013

17. *Industry Week*, “Best Practices for Developing Talent,” 2011-12-08

Implement the latest workforce analytics

Just as technology is presenting a significant challenge to manufacturers in terms of talent needs, it is also an essential part of the solution. It can provide the information CEOs need to support their business strategy—and the metrics to measure progress toward achieving objectives. Fortunately, most industrial manufacturers have embedded ERP (enterprise resource planning) systems they can leverage to collect workforce data. But they have to ask the right questions and ensure they are capturing the right data.

Technology can be used at every step in the talent management process to configure a talent program that meets a business's strategic objectives. It can help create the processes for a global workforce. Data collected from recruiting sources can help determine which sources and messages are most effective in attracting talent. By collecting and analyzing workforce data, HR departments can identify talent gaps by comparing workforce needs with current employee skill sets and skill levels. This information is useful both in informing recruiting activities as well as developing effective training and development programs, including those that are Web-based. Workforce data can also help in the design of effective compensative and incentive packages, reducing turnover and increasing retention.



PwC recently helped a diversified manufacturer implement the HR talent suite that is part of its ERP system. The application, which aggregates data on their workforce, will help the company determine what kinds of learning programs they need to fill skill gaps.

Manufacturing leaders can no longer wait to develop talent strategies. They already have job openings they cannot fill, and the gap is widening as megatrends disrupt and transform industrial manufacturing. Adopting talent management programs and processes will help manufacturers attract and retain workers with the desired skill sets. This is a challenge that requires flexibility and insight. And the stakes are high. Manufacturers with an engaged and skilled workforce will be more likely to enjoy a successful and sustainable future.



Questions to consider:

1. Have you assessed your workforce to determine which skills exist internally and what other skills are needed for your business to thrive?
2. Do you know what additional talent you will need in five years?
3. Have you implemented training programs to help workers develop their skills?
4. Is your key talent engaged and committed?
5. Have you provided your workers with a clear value proposition?
6. Is your HR function up to the task of supporting your business strategy?

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