Building a global talent pipeline

Finding, developing, and retaining tomorrow’s manufacturing workforce
This report was originally published by Booz & Company in 2012.
Even as their footprints are expanding from mature to emerging economies, manufacturers are getting caught in a talent squeeze. In mature economies, finding sufficient skilled talent has become something like searching for a needle in a haystack, and in emerging economies the pools of qualified talent are increasingly shallow and cost-prohibitive. To win in a talent-constrained environment, manufacturers must think beyond boundaries — both literally and figuratively — to leverage creative talent sourcing practices, develop global talent competencies, and cultivate “glocal” (global plus local) employer brands and employee value propositions.
Manufacturing’s global talent challenge

As business has gone global, so have the supply chains and plant footprints of most large manufacturers. The resulting demand for both blue-collar and white-collar employees has exacerbated long-standing talent challenges for manufacturers in the U.S. and Europe. It has also created new challenges for manufacturers in emerging economies, such as China and Brazil, as they seek to up-skill employees in their home nations and expand into mature markets.

In mature economies, manufacturers are grappling with aging workforces; talent shortages in science, technology, engineering, and math (STEM); and outdated employee value propositions. At the same time, they are trying to preserve and transfer knowledge, re-skill their workforces, and build new capabilities. In the U.S., Japan, Germany, and the U.K., more than half the working population will be older than 40 by 2015, posing a significant loss of institutional knowledge as older workers retire, and a near-term affordability dilemma, since their seniority commands higher wages and benefits.

Meanwhile, there is mounting concern over the lack of qualified young people entering the manufacturing sector. Attracting new talent to manufacturing has become challenging because the decline in employment stability and outdated and misaligned value propositions in the sector have lowered its career appeal. Young engineering graduates today want a better work/life balance and more geographic flexibility in their careers than their parents have had. The prospect of a career in a rural location with a traditional work environment simply cannot compete with the value proposition from a new-technology company like Google that offers flexible work arrangements and creative license.

To add to this conundrum, manufacturing itself is becoming more technologically complex with the adoption of ever more sophisticated machinery, robotics, and process-control software. More expertise is needed on the factory floor than ever before. These developments significantly raise the skills bar — inflicting a double whammy from
both the talent demand and supply sides. In the U.S., for example, the National Center for Education Statistics found that manufacturers already face moderate to serious skills shortages across their operations (see Exhibit 1).

Emerging-economy manufacturers confront their own difficulties in developing high-end workforces. The talent pools in the BRIC nations (Brazil, Russia, India, and China) are becoming shallower, with companies in every industry reporting that the lack of skilled employees and rapidly rising salary expectations are constraining their ability to operate and expand (see Exhibit 2, page 7). In high-growth manufacturing centers like Shanghai, the war for talent is fueled by consistently high employee attrition rates, despite large pay increases and other perks.

Exhibit 1
U.S. manufacturers reporting moderate to serious skills shortages

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>32%</td>
</tr>
<tr>
<td>Unskilled production</td>
<td>7%</td>
</tr>
<tr>
<td>Skilled production</td>
<td>51%</td>
</tr>
<tr>
<td>Engineers</td>
<td>36%</td>
</tr>
<tr>
<td>HR/IT/F&amp;A</td>
<td>13%</td>
</tr>
<tr>
<td>Sales</td>
<td>23%</td>
</tr>
<tr>
<td>Customer service</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: National Center for Education Statistics
The lack of managerial talent is particularly critical in many emerging economies. Leadership pipelines are underdeveloped, and there is a shortage of managerial candidates who know how to work in global teams and understand the norms of leadership in multinational corporations. As a result, manufacturers are being forced to bid up for the few qualified local candidates or import highly expensive expatriate managers.

Emerging-economy manufacturers are further challenged by the knowledge management requirements of globally dispersed business models. Many companies do not as yet have the organizational structures or processes for managing knowledge-intensive work globally.

Like developed-economy manufacturers, manufacturers in emerging economies must address their talent gaps while concurrently appealing to an ever younger workforce. By 2025, 60 to 75 percent of the workforce in the BRIC countries will be members of Generation Y (people born roughly between the late 1970s and the late 1990s). They will bring drastically different priorities and expectations to work than older population segments.

In short, manufacturers based in both developed and emerging economies are struggling to develop workforces capable of capturing the global opportunities in their industry. To meet the challenge, they will have to identify and adopt best practices in attracting, motivating, and retaining talent from around the world.
Exhibit 2
BRIC talent challenges

Unable to find skilled talent (percentage of companies by country)

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>43%</td>
</tr>
<tr>
<td>Russia</td>
<td>41%</td>
</tr>
<tr>
<td>India</td>
<td>54%</td>
</tr>
<tr>
<td>China</td>
<td>59%</td>
</tr>
</tbody>
</table>

Unable to meet salary expectations (percentage of companies by country)

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>53%</td>
</tr>
<tr>
<td>Russia</td>
<td>39%</td>
</tr>
<tr>
<td>India</td>
<td>39%</td>
</tr>
<tr>
<td>China</td>
<td>49%</td>
</tr>
</tbody>
</table>

Source: Sylvia Ann Hewlett Associates; Strategy& Emerging Markets Survey 2010
In our work with senior leaders, operational executives, and heads of HR at leading global manufacturers, it has become clear that no single company has fully solved the global talent conundrum. Nevertheless, three sets of innovative practices are emerging as ways to drive substantial impact and produce positive results (see Exhibit 3, next page):

1. **Innovate in talent sourcing**

2. **Invest in global talent competencies**

3. **Cultivate a glocal (global plus local) culture (employer brand and employee value proposition)**

### 1. Innovate in talent sourcing

As talent pools get shallower and shallower, manufacturers are resorting to alternative methods to recruit skilled employees, as follows:

*Employ specialized headhunters:* Specialized headhunters are playing an increasingly active role within corporate human resource organizations in manufacturing firms. For instance, the automotive supplier and building efficiency product manufacturing company Johnson Controls (JCI) has a specialized global talent research team charged with proactively searching out candidates for essential jobs in advance of openings. This team continually scours all possible sources of talent, mines passive talent, and aggressively sells the employer brand to ensure that JCI has a ready supply of job candidates.

*Partner with academia:* University partnerships are becoming increasingly important in filling the STEM talent pipeline. These partnerships extend well beyond on-campus recruiting days to developing custom curricula, integrating working experience with schooling, and identifying and developing promising candidates early in their academic careers.
Exhibit 3
Three sets of innovative talent management practices

- Employ specialized headhunters
- Leverage third-party outsourcing partnerships
- Partner with other companies, even competitors

- “Custom build” talent through university partnerships
- Tap nontraditional talent sources (e.g., crowdsourcing)

- Adopt a global career model
- Recruit boundary spanners
- Implement global training and development
- Expand knowledge management programs globally

- Invest in a strong global and local brand
- Tailor the employee value proposition for the culture
- Embrace local norms, behaviors, mind-sets, and commitments

Source: Strategy&
In addition, some companies are working with universities to identify promising international students early on and helping these students meet residency and citizenship requirements. This is increasingly important in industries such as aerospace and defense where security clearances require citizenship, making the talent challenge more acute. (Manufacturing companies also have become active lobbyists for immigration policies that create an easier path to citizenship for highly skilled talent.)

Effective university partnerships require a long-term commitment. Manufacturers that are particularly successful assign senior-level executives to own and proactively develop specific university relationships as part of their annual development objectives. One Fortune 100 manufacturer requires all midlevel managers and above in their engineering organization to “own” university relationships and actively participate in campus activities. These managers are recognized for their campus engagement levels, and robust strategy discussions about university relationships are held each year as part of the annual planning process. In this manner, the company builds a close working relationship with educational institutions, engages with high-potential talent early on to sell a career in manufacturing, and proactively shapes its talent pipeline.

Pursue alternative sourcing: More and more manufacturers are recognizing that talent does not always need to be on the company payroll or in one of its buildings. Some are using services for sourcing and leveraging globally dispersed pockets of skilled talent. One such service is the alternative model offered by InnoCentive, based in Waltham, Massachusetts. Founded in 2001, InnoCentive acts as an open innovation facilitator, providing a Web-based platform to engage a global network of creative problem solvers to work on critical projects, as needed, for monetary rewards. Anyone with the right skills can participate, including the client company’s own employees and customers. According to InnoCentive, since its inception, it has engaged more than 216,000 problem solvers from 200 countries on approximately 1,200 challenges, and has solved 50 percent of them.

Partner with outsourcing service providers: Although outsourcing has been traditionally used as a means of lowering labor costs, the rationale for outsourcing in the manufacturing industry has increasingly become gaining access to STEM talent and accelerating execution. Toward these ends, companies are integrating outsourcing service providers into their value chains and collaborating with them more extensively in functions that have traditionally been kept in-house, such as new product development, design, and innovation.
GE Healthcare, for example, has partnered with Wipro Technologies, an outsourcing services company based in Bangalore, India, to develop ultrasound and imaging products. The scale of the partnership extends across the value chain, including research, product development, product testing, and even sales and service for select products. This innovative partnership has enabled GE to get new products to market quickly, while also gaining access to untapped sources of talent in emerging markets.

2. Invest in global talent competencies

Meeting and managing the manufacturing talent challenge requires a global approach. This is the only way that companies can balance their workforces and quickly shift them when capabilities are required in one region and there is slack in another. This is easier said than done, but some manufacturers are pursuing this ideal by actively developing global talent management competencies, as follows:

Articulate a global career progression model: A global approach to talent management depends on employees who can and will work anywhere in the world. This requires international career paths not just for a few high-potential managers, but for everyone in middle management and STEM employees as well. International experience must be hardwired into career paths and pursued earlier in career life cycles. The goal is to create a pipeline of employees who are willing to go overseas for the experience without requiring heavy expatriate pay, as well as to target younger employees who do not have the same family considerations as older employees. Although such an investment in early-stage employees may seem counterintuitive, in practice it pays off by helping develop a strong skills base and increasing company loyalty among employees who appreciate the value of the investment made in them.

Recruit global boundary spanners: Not all employees may want or are suited for international assignments. That’s where “boundary spanners” can provide the catalyst to accelerating a global talent management strategy. Boundary spanners are people who are adept at working in far-flung local operations, as well as in corporate headquarters. For example, one global automotive supplier seeks out Chinese and Indian talent with international experience and Europeans and Americans with deep local knowledge to run their operations in China and India. These boundary spanners execute well locally, and advance the broader cultural understanding necessary to support the company’s global operations.
Implement global HR and talent processes: HR processes and systems have historically been fragmented and often local, making it difficult to identify the next generation of talent. In response, forward-thinking manufacturers are developing global reviews of the talent pipeline, identifying prospects for global development early on, and ensuring a balance of talent across regions. At Royal Philips Electronics, for example, regional talent reviews have been rolled up into global reviews, with explicit discussions about the global rotations required for the company’s developing management cadre. In addition, some leading organizations require employees and managers across the globe to record and update their skills and experience on internal networks, so the company can quickly identify and deploy its existing talent.

Adopting global HR and talent processes usually requires upgrading performance management processes. For example, one manufacturing and cement company monitors the global experience of managers and makes it a clear performance evaluation metric. Managers are explicitly evaluated against how much and how well they rotate people into international assignments. And leaders of business units and functions are rewarded for sending management talent from headquarters to offshore operations, and bringing overseas talent to headquarters.

Not all companies can rotate their talent globally, but in the absence of such a rotation, they can and should include representatives from overseas operations on their management and leadership committees. At the very least, this will give managers from around the world a better sense of the issues occupying headquarters and help them develop a network of valuable peer relationships.

Globalize training and development: Training — including formal classes, informal mentoring, on-the-job experiences, rotational development, special assignments, and international project experiences — is a significant element in the employee value proposition. It can also help manufacturers to develop global talent skills without necessarily requiring relocation or having to spend large sums on expatriate packages. Practical training is particularly important in emerging economies. While it’s true that China and India each produce more engineering and computer science graduates each year than the United States and Europe, it doesn’t follow that these graduates are immediately ready to enter manufacturing operations. As one Indian mechanical engineer stated in Fortune magazine, “There is still an abyss between the academy and the industry.”

Create a global knowledge management system: Knowledge management and sharing tools are fundamental to how work gets done and how innovations are leveraged and sustained in a global business environment. Happily, building communities of knowledge through
technology is an innate behavior for Gen Yers, who grew up on Facebook and expect the same access to collaborative platforms in the workplace.

Cognizant, a technology solutions provider with global operations, has grown revenues 50-fold since it went public in 1998 by relentlessly perfecting its approach to knowledge management and sharing. Its internal knowledge networking application, Cognizant 2.0, supports collaboration, speeds the transfer of best practices, and saves the company and its clients money through the use of structured document repositories and participative tools, such as discussion boards, blogs, wikis, and social tagging. The company reports that Cognizant 2.0 has enabled it to deliver projects in 20 percent fewer hours, on average, and has improved productivity as much as 70 percent on specific project management activities.

3. Cultivate a glocal culture

Strong employer brands and employee value propositions are essential to attracting and retaining manufacturing talent. They pay dividends in the form of more effective recruiting, happier and more engaged employees, lower attrition rates, and wage control.

Sell the career as well as the company: Strong employer brands are needed in an era when engineering and manufacturing companies and careers increasingly need to be sold to prospective employees. Young people are less inclined to pursue careers in manufacturing, given the attractive career prospects for graduates with MBA degrees and the promising opportunities in service industries. According to HR services firm Ma Foi Randstad, of the more than 700,000 engineers graduating each year in India, over 50 percent end up pursuing degrees in other areas and careers outside engineering.

To address this challenge, one German electronics manufacturer promotes its employer brand and careers in manufacturing using a variety of tactics. For example, it starts sending a steady stream of company and career information to students in the engineering departments at target universities two years before they graduate. The company also enhanced the value proposition for its STEM employees: implementing a program in which customers share feedback with the manufacturing and engineering employees about the importance of their work; establishing detailed career paths for engineers, allowing them to cycle through operational, design, and commercial roles to provide rich experiences without having to look outside the firm; and upgrading the ergonomics and colors in their engineering offices to enhance the appeal of the working environment. Over the last five
years, practices like these have helped the company limit its attrition rate to a remarkable 3 percent and fill its open talent pipeline within four to six weeks.

Create a glocal brand: Global manufacturers must go the extra mile to tailor their branding in a way that is locally relevant and compelling. Unilever, for example, not only maintains a strong global brand, but also tailors it to the local market in India, where it operates under the name Hindustan Lever. In this way, the company achieves positive recognition as a global giant with a strong local commitment.

Tailor the employee value proposition: A value proposition encompasses more than pay and benefits; it also includes the organization’s behaviors, mind-sets, norms, commitments, and informal networks. In a global company, many of these cultural elements vary with the prevalent local culture. Accordingly, successful global manufacturers tailor their employee value proposition to the local context, accommodating the culture and norms of the local labor markets in which they operate.

Holding fast to the values and traditions of the company and folding in local values is sometimes a delicate balancing act. But employee value propositions should take into account certain societal dimensions, such as whether the local social mores value individualism or collectivism, what role the state plays versus private enterprise, religious beliefs, laws and conventions, and the gender roles that are considered acceptable in the workplace. This helps explain why one medical device manufacturer uses different job titles in China, provides escorted transportation for women employees in India, pays for three-course lunches in France, and offers additional days off in the United States. At the same time, this company strongly advocates one universal set of corporate values, evaluates all employees against a common set of competencies, and has a single global brand.
The talent challenges facing global manufacturers in both mature and emerging economies are acute. While the particular hurdles facing manufacturers in mature economies like the United States and western Europe may differ from those in their emerging market counterparts, all manufacturers are competing for the same finite pool of talent.

As the three sets of best practices make obvious, there is no single silver-bullet solution to this new reality — manufacturers will need to pursue and develop talent in a variety of ways. Further, making these individual efforts work together will require a serious commitment to (and investment in) long-term, strategic workforce planning. For this reason, talent planning and development must be added to the senior management agenda.

Manufacturers that ignore this reality can pay a steep price. As the chief human resources officer of a Tier One automotive supplier told us, “We struggled to get talent issues on the senior management agenda, and every year our proposals would get cut from the investment plan. When the industry rebounded, we had no brand recognition in the employment market and we ended up paying twice the amount just to attract the basic talent we desperately needed.”

The winners in the race for talent will be those manufacturers that develop global pipelines characterized by innovative recruiting methods, global competencies, and glocal employer brands and employee value propositions. They will be the first to field the workforces needed to support the capabilities that give them the right to win in a global marketplace.
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