



Six-step guide to addressing critical shortages in skilled expertise

Skilled worker shortages are a threat to economic recovery and productivity.

One of the most significant challenges facing many businesses today is the dire shortage of highly skilled workers, engineers in particular. These shortages are reaching such alarming levels that business leaders and economic pundits believe the mismatch of supply and demand could hinder economic recovery, especially in the UK. However, we are confident that real solutions to reduce the skills deficit without increasing costs do exist and would benefit any business in need of additional talent.

Product innovation is a widely acknowledged, powerful driver of growth. Companies across developed economies that compete against organizations with lower cost structures can leverage new products or innovation as a means to stimulate growth. But, companies that depend on highly skilled and technically competent engineers face an added burden: a critical shortage of skilled manpower. The CBI in the UK, research-based organizations in the US, and other regions have published reports supporting this claim. For example, according to The Institution of Engineering and Technology's recently published skills and demand survey reports, 41% of the companies interviewed are looking to recruit IT, technical or engineering staff (up from 24% in 2011).¹ Unfortunately, more than half of those surveyed could not find highly skilled candidates, especially those with at least 5-10 years of experience. Similarly in the US, the recently published report by The Manufacturing Institute and Deloitte paints a bleak picture. This report predicts that, as growth accelerates, as many as 2 million manufacturing jobs out of the 3.5 million needed will go unfilled due to the chronic shortage of skilled workers in the US.²

As governments, business leaders, academia and professional trade organizations continue to discuss and debate options regarding the talent shortage dilemma, there is little hope of an immediate solution. Naturally, many companies are responding by developing closer relationships with relevant educational institutions. However, instead of waiting for the impact of any government or other initiative to filter through the system, there are real solutions available today that substantially reduce the skills deficit without increasing costs.

¹ The Institution of Engineering and Technology: Skills and Demand in Industry Annual Survey 2014

² The Skills Gap in U.S. Manufacturing 2015 and Beyond

Our six-step guide outlines strategies executives can use to neutralize the effects of today's skill shortage.

Step 1: Boost efforts to drive greater productivity

Despite contrary views from managers in charge of skilled activities, our experience shows that there is usually room for productivity improvements as they relate to these particular tasks. Wasteful practices evolve over time and become habitual. In one organization we worked with, engineering efficiency levels hovered around 45-55% as a direct result of poor email discipline and meeting effectiveness. Once inefficient working habits and ingrained practices were addressed, the engineers averaged a 15% higher rate of productivity within six months.

Step 2: Eliminate non-value added work that diverts skilled worker attention

There is an immediate opportunity for management to forecast the number of people necessary to perform key tasks, and then to manage the workforce accordingly. Organizational "right sizing" in these critical areas allows for the reallocation of valuable resources to other critical areas of need. Skilled workers often have the capacity to do more when they are allowed to concentrate on tasks that require their unique skills. The trick is to eliminate those non-value added tasks that "burden," or limit the capacity of the more highly skilled technicians. It is management's responsibility to make sure that people with unique skills work to their full potential. For example, the labor utilization rate for a manufacturing company that produced parts for the automotive sector had dropped as low as 55%. Within four months, throughput increased by 23% as a direct result of our team redistributing highly skilled resources to other departments in need. Similarly, we addressed a series of issues for a mining company in Africa that were severely limiting their engineers' productivity. In less than seven months, there was a spike in the amount of work orders completed by the engineers as throughput increased by 21%.

Step 3: Concurrent action needed on three fronts

Based on our findings, productivity improvement with skilled personnel is complex and requires simultaneous action on three fronts: behavioral change, management system enhancements and process improvements. Behavioral change requires improvements in day-to-day practices, systems necessitate improvements in planning and monitoring, and processes impact day-to-day work flows. After partnering with a global airline manufacturing company, we applied this type of multifaceted approach to achieve in a 25% increase in productivity of its highly skilled engineers – reducing their work backlog, output and product delivery time to market.

Step 4: Secure knowledge transfer

Surprisingly, occupational development and training does not seem to be a priority for many companies looking to recruit highly skilled workers. The Skills and Demand in Industry Annual Survey indicated that only 16% of companies believed they would raise training standards. Furthermore, 28% felt there was nothing they could do to improve training standards. It cannot be stressed enough: skills development and training are crucial during a talent shortage, as well as bridging internal knowledge gaps between senior level and new employees. The knowledge transfer from a veteran workforce allows companies to operate efficiently with fewer skilled employees and accelerate growth when new talent is acquired.

Step 5: Build operational and management capabilities

We recommend that skills development focus on operational skills – simultaneously increasing both proficiency and competency. The result is a solid foundation of knowledge that gives employees the ability to manage greater operational responsibilities in a shorter amount of time. Training needs to also include the development of critical management and supervisory skills. All too often, employees are promoted to middle management without the skills needed to be an effective leader. Senior executives must put building blocks in place to properly develop effective managers, as well as strengthen the abilities of skilled workers.

Step 6: Take action now

While the shortage of highly technical skills is a widespread issue affecting many industries, there is an immediate solution: improve the productivity of existing skilled personnel. Companies that act now have a relatively inexpensive solution to a potential long-term systemic problem and a distinct advantage over competitors that are slow to respond.