



## *BUILDING A RESILIENT WORKFORCE: OVERCOMING TALENT SHORTAGES IN MANUFACTURING WITH INNOVATIVE STRATEGIES AND TECHNOLOGY*

How manufacturers are shifting their thinking, and their technology, to address the talent crunch.

Of all the challenges confronting today's manufacturers, a shortage of talent may be the most pressing. It couldn't have come at a less opportune time.

According to Deloitte's report, [Taking charge: Manufacturers support growth with active workforce strategies](#), the manufacturing sector, particularly in the US, is experiencing a resurgence. Employment has surpassed pre-

pandemic levels, driven by several factors. Legislation, including the Infrastructure Investment and Jobs Act, the Inflation Reduction Act, and the Creating Helpful Incentives to Produce Semiconductors Act, have all impacted employment in the clean tech, semiconductor, and electronics sectors. Meanwhile, many manufacturers have moved to establish facilities closer to their US customers in a bid to de-risk supply chains.

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Michael Schlotterbeck  
Principal, Industrial Products and  
Construction, Deloitte US



This, in turn, has driven a need for skilled labour domestically. As manufacturers embrace automation, the Industrial Internet of Things, artificial intelligence, and cloud-based software and business models, the need for workers with the skills to make the most of these technologies has grown intense. The fact is, the necessary talent is in short supply, and looks likely to remain so.

"We're predicting a 30% gap in skilled labor," says Michael Schlotterbeck, Principal, Industrial Products and Construction, Deloitte US. This, according to Deloitte's report, could represent almost 4 million new positions that will need to be filled in the next ten years.

"Automation, for example, comes with its own complex skill sets," Schlotterbeck adds. "You need programmers, people that can do logic control, front end developers, back-end developers. So, the labor shortage impacts both the trades, and the technical skill set."

#### **FINDING THE RIGHT TALENT BEGINS WITH THE RIGHT TOOLS**

An aging population is, unsurprisingly, part of the reason for that gap. Yet the next generation of workers is not rushing to replace those experienced manufacturing hands. That's got a lot to do with perception. Younger workers, who consider work flexibility to be a significant "must have," see manufacturing as not being able to deliver. After all, the only way to make products is to actually be on site. "Even though manufacturing is an extremely exciting, technically leading, innovative industry," says David Sweetman, Senior Manager, Industry Marketing, Workday, "there has been a perception with the younger population that they're going to be tied to a shift, on a production line."

Technology can help change that perception. Leading manufacturers are now deploying dynamic scheduling management solutions, from Workday and other providers, which can give employers and their employees more visibility over shifts. This enables everyone to better manage their time or

make the swapping of shifts with co-workers easier. After all, manufacturing workers have medical appointments and children's baseball games to attend to too.

Dynamic scheduling management solutions offer additional benefits. For the manufacturer, having the power to see a schedule, know the skills of everyone on the line, and identify where adjustments need to be made facilitates planning for the future. For the worker, visibility into schedules reveals areas in the organization where a need for skilled people exists, and thus, which job openings current employees can apply for as they look to advance their careers.

"Many manufacturers are giving more autonomy and control to frontline workers," notes Schlotterbeck, "allowing them to manage themselves a bit more." The thinking is, as long as the work gets the job done, on time, safely, and with high quality, then technology can deliver more scheduling flexibility and predictability. "This provides a better work life balance, in ways that have not been seen before in manufacturing," Schlotterbeck continues.

#### **SHIFTING ATTENTION TO THE WORKER**

The notion of giving workers more autonomy is, in fact, representative of a cultural shift across the manufacturing sector. Now, the focus is squarely on the worker and on keeping the worker happy.

"Happy workers have competitive value," notes David Sweetman, Senior Manager, Industry Marketing, Workday. After all, the more skills that workers need to drive modern manufacturing processes, the more valuable they are. It simply makes economic sense to build a culture that will drive retention and staff development. In fact, notes Sweetman, "the cost of hiring, training, and developing is recognized now, because, thanks to solutions such as Workday, we've got the data and the visibility to see it."

The message to manufacturers, then, is that building a culture of retention and growth requires the right technology. Today's

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organizations need tools that will deliver detailed insights on whether employees are happy or unhappy, and that can facilitate scheduling and career development.

"The way we've been thinking about it is to be able to surface the right data at the right time," says John Marth, Manufacturing Industry Advisor, Workday. "Can I scan through all job applicants quickly to understand the skills that they have? Can I use artificial intelligence and machine learning to better understand worker preferences, and create a schedule that meets everyone's needs?"

Another element of a worker-centric strategy, suggests Marth, could include the creation of engaging employee experiences through mobile applications. The idea being, make it easy to deliver important information, with an intuitive, flexible, consumer-grade interface that today's workers are already familiar with. After all, the more that manufacturers can meet current and future workers where they are, the more attractive those manufacturers will be as places to build a career.

Successful manufacturers are already realizing the rewards of doing so. "We're seeing a lot higher retention of employees," says Marth. When employees feel heard at the workplace, "you create belonging through engagement, and show your employees a path from job to career. That delivers retention."

With a more engaged workforce, manufacturers have a more robust path to growth. "The biggest thing that I've been hearing from our customer base," Workday's Marth continues, "is that they want to better identify the skills and talents that they have internally, and then understand what their employees might be interested in to reskill or upskill, so that they can leverage those folks. That's really been the biggest shift in mindset."

"Technology today allows for this mindset to be a reality," Marth continues. "The organization has clear visibility as to the desires of their workers. The workers have clear visibility as to what the organization needs. A match can then be made."

#### **NEW DEMANDS ON WORKFORCE PLANNING**

This new mindset highlights another current trend: the need for more precise and sophisticated workforce planning.

"When we say workforce planning, what we really mean is, taking stock of what you need," explains Michael Schlotterbeck, Principal, Industrial Products and Construction, Deloitte US. "Do you have the skilled labor to meet demand? If you don't, how do you go get people? How long does it take to train and integrate a new workforce?"

"Workforce planning is not a novel concept in manufacturing," adds Victor Reyes, Managing Director, Human Capital,

Deloitte US. "But it's a very tricky thing to do really well." Reyes points out that as manufacturing techniques advance and leading-edge technologies such as industrial robots and artificial intelligence become more commonplace, the skill sets that manufacturers need have become more complex.

As an example, Schlotterbeck points to a highly engineered manufacturing client in need of a specific type of welder. The organization needs 500 such welders, and currently has only 300. "You don't just make brand new artisan welders overnight," says Schlotterbeck. "Nor can you automate that away. So now you've got a gap, and workforce planning is the answer to addressing that gap."

At the same time, the competition for many critical skills has expanded. While many manufacturers have very specific skill requirements, they're also competing, simultaneously, with a wider pool of employers for the same set of technical skills.

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Advisor, Workday,**







### A STRATEGY FOR SUCCESS

As a result, manufacturers must adopt a multi-pronged strategy to win the battle for talent.

"Looking inward and challenging assumptions about what your workforce wants and needs is a really great starting point," says Reyes. "Because it's dramatically easier to keep somebody than to find somebody new." Manufacturing leaders should consider ways to improve the worker experience by offering different levels of flexibility and career development.

Reyes also advises taking a skills-based approach to planning and deploying talent. Instead of defining workers solely by their current jobs, look at skills and experience as a jumping-off point for cross-training. For example, an operator on one particular machine might have 80% of the skills needed to do three other jobs in the organization. "If we understand that, and we know what the other 20% is, then we can upskill and prepare that operator to back somebody else up as required," says Reyes. "All of these capabilities are enabled by a solution such as Workday."

"Some of the solutions we've got in place," adds John Marth, Manufacturing Industry Advisor, Workday, "are specifically designed to help analyze skills across the enterprise, and demonstrate where we may need to buy, borrow, or reskill talent." As manufacturers are beginning to realize, that acquisition can come from inside, or outside the organization.

Of course, manufacturers should also look outward, and build a talent pipeline to better prepare for the long term. One of the key tenets of this approach is to begin the process early. This can include traditional methods such as apprenticeship programs, as well as more innovative outreach activity. "Some manufacturers are going all the way back to middle schools," observes Sweetman, "and explaining that manufacturing is interesting." Similarly, Deloitte is donating science, technology, engineering, and mathematics (STEM) themed toys to many middle and high schools, to help inspire the next generation of manufacturing talent.

Victor Reyes, Managing Director, Human Capital, Deloitte US advises taking an ecosystem approach, which can include partnering with schools, local governments, and even competitors, to invest in the infrastructure required to develop talent locally.

Clearly, innovation, and a readiness to try new approaches will be the order of the day going forward. Manufacturers who act now to evolve their thinking and put the right tools and technology in place will have a distinct advantage in today's, and tomorrow's, talent environment.

Deloitte and Workday can help you build a talent strategy for manufacturing's next generation. Talk to us today about how to get started.

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Managing Director, Human Capital,  
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