ASK GERARD O’NEILL ABOUT THE state of today’s employees when it comes to handling the equipment and he’s blunt:

“Customers are building Formula One race cars,” said O’Neill, president and CEO of American Laundry Systems. “You need people who know how to maintain a Formula One race car. You can’t give it to the guy who used to fix your old pickup truck.”

The increasingly high-tech capabilities are affecting positions that extend well beyond mechanics. O’Neill believes that the chief engineer and plant manager, in particular, need highly specialized skills. Otherwise, “You won’t get the throughput, the production, the cleanliness, and the packaging that you’re looking for,” he said.

David Bernstein, president of Lapauw USA, agrees. “Expectations and reality are two different things. In the best of all possible worlds, an engineer or maintenance person needs electrical troubleshooting skills. They need to be able to read electrical and plumbing schematics. They need mechanical skills, including using hand tools, and computer and electronic skills.”

Both Bernstein and O’Neill know the technological innovations firsthand through their work in equipment and laundry design. But a quick look around any modern laundry will show just how right they are. Programmable logic controls (PLCs), touchscreens and state-of-the-art computer systems are present on equipment while tablets and GPS routing may impact delivery. Added complications come from the use of proprietary systems; Bernstein said a typical laundry facility may integrate as many as eight or 10 different computer systems.

Ironically, though, changing demographic expectations might help laundries benefit from high tech. According to a survey by PricewaterhouseCoopers (PwC), 59 percent of millennials say that they are more attracted to employers who provide state-of-the-art technology. That does not mean that laundries will be at the top of the list when it comes to recruiting the next generation of technically skilled workers, though.

**Selling the Benefits**

Laundry’s use of technology has led to significant benefits. Bernstein, a third-generation equipment manufacturer, remembers starting out as a kid working in the parts department. “The controls that were used to make the machinery do what we needed it to do were, by today’s standards, Stone Age.” As manual switches gave way to PLCs, it led to greater accuracy and improved methods.

While Bernstein notes that laundry was slow to make the switch, he believes it has made up ground and can tout itself as a technologically advanced industry.

Many of those advances have enhanced the setting for modern laundry facilities, which have improved conditions for workers and greater environmental stewardship of water and energy. Millennials are particularly attracted to industries which prove to be environmentally friendly.
Technology = Savings

Laundry owners understand that technology is leading to greater savings—and will continue to do so. Advances in automation and robotics can lessen the heavy lifting for employees or reduce repetitive motions. But those advances will require even more technological skills, particularly among workers required to maintain them. “This problem is becoming rampant,” O’Neill said. “Our technology is ahead of our skillset.”

He notes that already software, touchscreens and PLCs are so complicated, “you need somebody with a good brain and a good education to handle that.”

As equipment has improved production capability, though, he believes maintenance needs to be performed more frequently to keep up with the pace. “Now, you need to do maintenance, to replace the belts and photo eyes prior to them breaking. When a machine breaks down, instead of it doing 500 pounds an hour, it’s now doing 1,000 pounds an hour. You’ve lost exponentially more productivity as a result.”

He believes preventive maintenance is crucial in today’s world—but again, that requires workers to perform it.

Some laundries also use predictive maintenance—anticipating how and when machines might need to be maintained—but that, too brings additional analytical skills.

Data analysis extends well beyond the machines themselves into actual production. O’Neill believes that many laundries have the capability to “measure it, gather it, and look at it.” He breaks the industry into thirds: “One third has production management software to measure the facility and use the information well. Another third has the software, but the manager has no idea what to do with the information. The final third doesn’t do it at all. They read a stopwatch.”

Data analysis skills are vital in a number of industries and will only increase. Already, though, it is difficult to find these types of workers. According to a 2016 survey by the Society for Human Resource Management (SHRM), 78 percent of human resource managers said they were having difficult recruiting for data analysis positions. The federal Bureau of Labor Statistics says the need for statisticians will increase 34 percent between now and 2024.

O’Neill believes this type of analysis will be a needed skill for the plant manager. “You can give him all the tracking software and add-ons that measure everything up to and including the air and electricity used. But you have to know how to analyze the data and implement changes to take advantage of that.”

Bernstein said he sees a few operators who understand the potential of data analysis and are “hiring talent to address that, to fine-tune their businesses and operations in a way that increases profits and competitiveness. I think we will find that good data analysis and good statisticians will become more and more necessary in our industry.”

Those skills will not be just nice to have, Bernstein believes. “The people who get this are the ones that will survive into the next century. That may sound really far into the future, but if you’re not thinking about it that way now, you won’t survive the next decade.”
Missing Pieces

According to the Manufacturing Institute’s survey of executives, the following skills are missing in today’s manufacturing employee:

- 70% Technology/computer skills
- 69% Problem-solving skills
- 67% Basic technical training
- 60% Math skills

Highly Competitive

Laundry is hardly the only industry undergoing a technological revolution. Other industries have brought different approaches to meeting the demands of tech skills.

- Luxury automaker BMW sought to help its local dealers by recruiting mechanics. It’s a rare step that the international conglomerate is finding workers for independently owned dealerships. But the steps are necessary; according to a New York Times article, U.S. auto dealers will have a shortfall of about 25,000 mechanics over the next five years. Toyota has developed its own apprenticeship programs to reach high school students who don’t have the same access to “shop” programs that they did a decade ago.
- O’Neill sees parallels in the food service industry, another area where he has worked. He believes laundry can learn by following that industry’s commitment to maintenance. “Their machines are never down, never broken. If you’re supposed to replace something in 12 months, they replace it in nine. They don’t take the chance.” He also sees more of a willingness to pay mechanics and skilled workers—a practice in which laundry can fall short.

Manufacturers across a number of industries are adding internships and apprenticeships as a way to improve successful hiring. Training institutes like Lincoln Technical are adding hands-on programs. Bernstein said there is some talk about creating a training program to bring maintenance personnel in from other industries and train specifically on laundry needs. “These are things that we see other industries do in order to solve a problem that they know exists. We can look at other industries and how they’ve filled the talent vacuum. We’d be well-served to create similar opportunities.”

Equipment manufacturers also have a role to play. Bernstein says they should be “listening to the customer and finding out what their challenges are. We can address those challenges and develop solutions to solve those challenges. Once that is done, we need to make sure people are trained. I’ve seen a number of ways of doing that, from bringing managers and engineering people to the factory during the final test stages to give them that insight; onsite training with managers and engineers and operators; and offsite maintenance seminars in a less pressured environment.”

Thinking Outside the Box

There is no doubt that technology is changing the laundry industry, but laundry is far from alone. The same pool of technically skilled workers is sought by many other industries. “That’s part of the whole equation: How do we get younger minds to our industry when we have to compete with Google and IBM?” O’Neill said. “They have air-conditioned offices and they don’t have to get their hands dirty. Some of the state-of-the-art facilities being built today are very computerized and automated.”

He said that some newer facilities have all equipment connected to the internet. “We set these up so that if the former pickup truck mechanic can’t fix it, the manufacturers’ technician can troubleshoot it remotely. Nine out of 10 problems today are software problems that can be fixed remotely with a keyboard and a mouse.”

Bernstein believes laundry will benefit from adopting programs that other industries have succeeded with, including Lean Six Sigma, a technique that uses teamwork to reduce waste and variation in processes. “Laundry is just a factory. They’re bringing in raw materials and sending out a finished product. The sooner that people understand that we run factories and bring good manufacturing best practices in, the better position we’ll be in.”

It also may help to consider skills that translate. Bernstein notes that some laundries have brought in new general managers who have successfully run other types of businesses—and that is paying off.

Of course, today’s highly skilled technical worker may already be within the building in some capacity. And while it is important to look outside to meet the looming need, Bernstein suggests internal recruiting as well. “As managers and owners/operators, we have to be trying to do what we can to foster more education in the digital world to our existing workers. That’s something a lot of people aren’t asking about, and they should be.”