



Workplace Safety Still Needs a Human Component

Workplace safety is—or should be—a primary focus of every organization, regardless of whether we're talking about a classroom, an office, a manufacturing facility, or an oil rig. Employees deserve a workspace that is as safe and secure as it can possibly be. On top of these fundamental issues associated with worker well-being, safety should be central to all management thinking because unsafe workplaces:

- Experience decreased productivity
- Are less profitable
- Produce lower-quality products and services

In short, it pays to be a safe workplace.

In this article, we will look at the state of workplace safety practices today—and how experience, combined with the latest technology, makes workers much safer as they go about their duties.

Today's Workers Are Safer Than Ever Before

In the U.S., the workforce is safer than they have ever been. Central to this improvement in safety is an increased use of technology.

In today's factories and plants, automation plays a vital role in safety processes. Machinery has the capacity to sense potential problems that far exceeds anything our human senses can measure. Gas leaks, valve malfunctions, down to the smallest

element just starting to behave at a sub-par level—can be detected and reported on immediately.

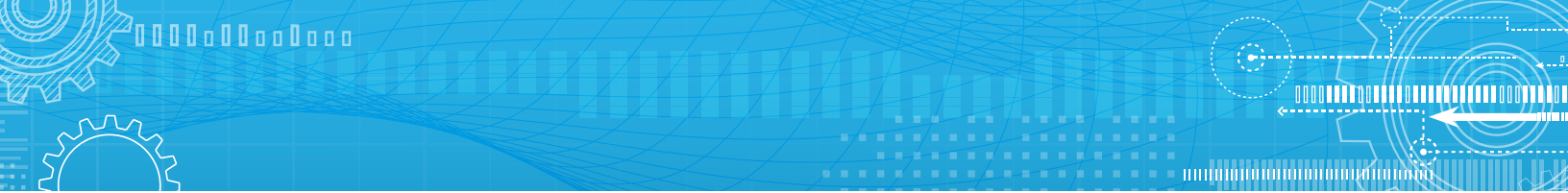
In short, the systems that are in place are sound. Systems and processes are understood by everyone on the factory or plant floor. There is a widespread confidence that procedures are now in place to protect and monitor, providing an essential early warning before something catastrophic can potentially occur.

Being able to measure processes and outputs to get essential knowledge before an accident can occur has saved countless lives and valuable capital equipment across American industry. However, there is a downside to this automation culture.

The Dangers of Routine

Automating safety is cost-effective and relatively straightforward. However, like everything else that is reliable and trustworthy, it soon becomes routine. The manufacturing complex today perhaps lacks the rigor and watchfulness of previous generations because it no longer feels necessary to be constantly on guard; there's a machine to do that. Safety is now routine and complacency can set in.

However, when we find ourselves in a routine situation and an upset occurs, it's very quickly no longer routine. Suddenly, everyone is shaken out of their comfort zones. People need to understand what they must do without taking up valuable time going through the operator's manual. Many workers who have learned only the present, automated procedures may find themselves lost when things



fall outside the norm: they simply don't know what to do.

The Human Factor

When something goes wrong in a plant, it's often a veteran worker who knows what should be done. Seasoned workers have a better understanding of their systems—if a transmitter isn't working correctly, they can bypass the transmitter and know how to mechanically manipulate the process to achieve the same results.

Today, with the sophistication of equipment currently being used by industry, there's a chasm between the veterans in the workforce and the new hires. The new worker is often suitably skilled and on top of what's going on with the current state of the equipment, but if the legacy equipment does not work, he or she is unlikely to know what to do because they have never experienced the issue or covered it in their training.

The sophistication of the equipment and the technology that we have today is superseding the knowledge of what to do if that particular system isn't working. So where do companies find these lost skills?

Achieving the right blend of skills and know-how is a delicate operation. The human factor that is largely absent from the typical safety process has to be coupled with the automation and technological methods currently in place. And the two sides have to co exist to create a more effective, comprehensive safety environment.

The responsibilities of the human side of this new equation are largely in the background most of the time because the automated side of the equation

will do most of the work. But when the human operator does have to attend to a problem, then he or she has to be trained and has to be safe. Human operators must understand what the consequences are of their actions—and know how to save the process.

Training for Success

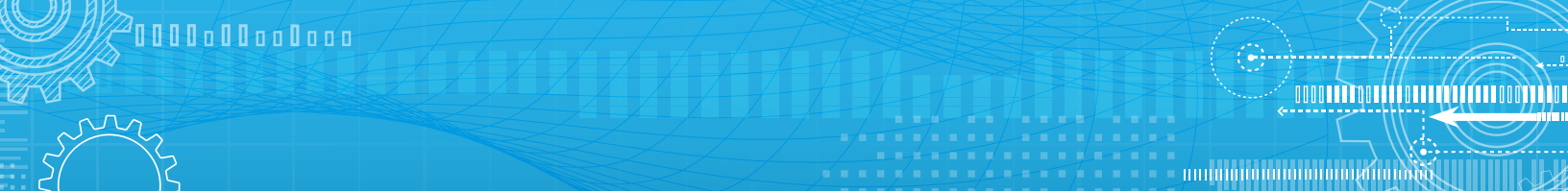
It's easy when you're in a classroom answering questions on a test about workplace safety. It's a very different proposition to be directly confronted by a situation that threatens the safety of you, your team, and the wider population. Your response to the situation must be appropriate and timely.

To make sure your workforce is ready for any safety issues that arise, you should include hands-on, interactive training. When students actually get their hands on equipment, when they interact with the tools and processes directly, they get a much better understanding of how these things work together.

This understanding of the power of real experience goes back to the days of traditional apprenticeships. In a factory, the journeymen would take their apprentices out to practice opening a routine manual valve (for example), just so they would have a first-hand understanding of what it was, what it did, and to feel the power that flowed through it. These were tactile, real-world experiences. And that training worked.

Today's training methods should be equally tactile.

Classroom-centered training has its place, but a learning experience that engages a student across multiple senses will have a longer-lasting effect on their learning and understanding. Today's



learning technology allows for a more interactive, multi-sensory experience. New recruits can work on touch-screen monitors that take them to a pre-set process where every decision they make has a consequence they can instantly see and understand.

Interacting with actual workplace technology helps to reinforce concepts and safety procedures. Now employees are learning; they're interacting with a new process—safely—but developing a thorough understanding of how it works and how their actions have real-world consequences.

It's incumbent upon companies today to develop a training system for their new recruits that will provide them with the levels of knowledge and

experience that are being lost from U.S. industries due to the retirement of experienced workers. Safety should not be an afterthought; safety training should not be a dull half-day program in a stuffy office, looking at hundreds of slides. Safety should be a dynamic, central component to any industry training program.

If you lack the resources or capabilities to train your staff in how to work safely alongside today's technology, look for a training partner who can help. Look for a company with experience in your industry and ensure they work with you to produce a safety training program that matches your needs and requirements. Working together, you'll be in a great position to overcome whatever safety issues arise in the future.

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