



Workplace Safety

Using Technology to Improve Workplace Safety

Adam Shalvey | Dec 20, 2016

What You Need to Know

About 13 workers died on the job every day in the U.S. in 2015.
Apps, cameras, drones and the cloud are helping make worksites safer.
New technologies are becoming more advanced and versatile.

Here's how companies are using innovations to keep worksites safer than ever.

From today's email and smartphones to the coming wave of virtual reality, cutting-edge technology and its accompanying trends affect almost every aspect of our personal and professional lives—whether we like it or not. With an average of 13.2 job-related fatalities every day in the U.S. in 2015, according to the Occupational Safety and Health Administration (OSHA), it's no surprise companies ranging from mom-and-pop shops to the Fortune 500 level are using innovative technology to improve and streamline the way they approach and implement safety initiatives.

In fact, Avetta, a global provider of supply chain risk management solutions, was recently announced as the winner of the 2016 Technology Innovation Award given by Ventana Research, a market research and advisory services firm based in Bend, Oregon.

The award recognized Avetta's use of cloud-based software to qualify and assess contractors and prevent risks in supply chains, while enhancing corporate commitment to environmental protection, occupational health and workplace safety.

Monitor Data to Mitigate Disaster

Avetta is far from alone in its use of technology as a solution for improving safety. **Honeywell**, for example, was among the first companies to use analytic and diagnostic technologies that monitor and collect data with the goal of creating an informed, corporate-wide culture of safety. By analyzing the relevant data and feedback collected, safety managers at the Fortune 100 company based in New Jersey were able to identify the factors affecting the implementation and performance of safety products, affording them the luxury of devoting more time to leadership and less time on enforcement.

Similarly, several trends are emerging among construction companies that are using wearable technology, such as hard hats fitted with cameras, sensors and user interfaces, and drones and robots that can perform certain tasks considered high risk for employees.

A More Dynamic View of the Workplace

At the Edward C. Levy Co. in Detroit, the use of technology to improve safety is considered a top priority for the nearly 100-year-old business that deals in, among other things, lightweight aggregates, asphalt, cement, concrete and agricultural products.

“We have been utilizing technology on our mobile equipment that helps improve visibility and reduce blind spots,” says Samantha Turner, steel mill services safety manager at Levy. “We installed a camera system, which provides operators with a 360-degree view to see pedestrians, other mobile equipment, and stationary objects in congested areas.”

The company also uses a variety of mobile and tablet apps such as the ***OSHA Heat Safety Tool app***, which, among other functionalities, allows workers and supervisors to calculate the heat index for their worksite and display a risk level to outdoor workers.

Safety Solutions for the Future

While robots and drones aren’t necessarily options for smaller companies with limited budgets, other solutions—cameras, monitoring software and similar technologies—are likely to be more economical, and effective, options. Keep in mind that investing in technology can reduce the likelihood of workplace accidents, potentially saving companies significant capital in the long run. In 2013, the most recent year for which a valid total is available, U.S. companies spent \$62 billion related to employees being inactive for six or more days because of workplace accidents or injuries.

Knowing that, investing in technologies that will be able to monitor key indicators like a worker’s heart rate, breathing, posture, drowsiness level and exposure to toxic gas may not be so hard to justify.

What safety tech are you using at your worksite?

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