

## THE SAFER WORKPLACE

# Improve Safety, Efficiency and ROI: Leveraging Technology to Manage Safety More Proactively and Effectively

by Todd Hohn, CSP

In my experience, most safety professionals strive toward continuous improvement (even if they don't use that exact phrase). That comes, first, from a commitment to keeping workers as safe as possible. It is also a logical outcome of coping with ever-changing regulations and pressures to justify budgets. With safety becoming increasingly valuable as a competitive differentiator, there are also strong business incentives to seek better safety tools and equipment, safer processes, and more effective safety training and management practices.

Despite all that, programs that sustain continuous improvement are rare. In many cases, graphs of incident rates, lost time and other metrics reveal a series of peaks and valleys over a period of years. Other companies hit a performance plateau — and may doubt whether it's even possible to improve further. At larger organizations, there is the added challenge of maintaining consistency across multiple departments or sites. A small percentage of underperformers or, worse, a single catastrophic incident, may eclipse significant improvements elsewhere and cause lasting damage to the company's reputation.

Start listing the factors that make continuous improvement difficult and many will fall under the category of “Human Limitations” — knowledge gaps, failure to spot a hazard or employ a proper procedure, managerial directives that conflict with safety goals, and safety professionals simply lacking the time to engage in activities that could drive improvements. Conversely, what almost all of today's top-performing safety programs have in common is that they're overcoming “human limitations” by leveraging technology and a system-based approach to safety management.

### UPSHIFTING SAFETY PERFORMANCE: FIVE GEARS TO DRIVE IMPROVEMENTS

There are five key areas where safety improves — or breaks down. Like gears, these areas are interrelated, and there is an upward progression toward peak performance.

The first two gears are pretty fundamental: **worksite conditions** and **employee behaviors**. Regulations in these areas get everyone moving toward safety by mandating certain worksite conditions, hazard management, appropriate equipment, training and so on — and most programs accelerate well beyond compliance. Still, there are limits to the quality and consistency of safety performance that can be achieved by focusing on these areas alone, just as there are limits to how fast a car can go if you keep it in first or second gear.

Almost every safety program will say it has **processes** (e.g., “this is our incident investigation process”), and many use the word **system** when talking about the program as a whole. But these third and fourth gears only improve safety performance when we push them beyond generically correct definitions. Processes must provide clear structure and guidance for the workforce, while also solidifying how safety professionals track and measure safety. A safety management system must define the values, goals and strategies that will align diverse processes and functions, while also providing benchmarks to gauge progress and guide corrections. Clarifying roles, responsibilities, and lines of authority, and providing reliable means for communication within processes and systems are also essential for accountability and clarity.

Continuous improvement depends on these gears — and on the quality, quantity and frequency of data that they provide. Opportunities for improvement will be limited if data comes only from traditional lagging indicators like total recordable incident rates or workers' comp claims. Such indicators are valuable, but they drive improvements too late — after the damage is done. By themselves, they can also be misleading since they describe a past state rather than what's happening in your workplace right now. The most effective safety management systems are engineered to collect and respond to leading indicators. To take a simple example, a company might create a process to perform weekly observations and

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track leading indicators such as number of unsafe behaviors observed, or use a scorecard to gauge a broader range of assessments. Combine that with other processes, such as conducting workforce surveys and reporting near misses, and you have a steady stream of up-to-date information that can help you spot potential problems and address them proactively before an incident occurs. Correlating leading indicators with lagging indicators over time makes them even more valuable, guiding the allocation of preventive resources to where they're needed most.

The fifth gear — **safety culture** — is both the sum of the first four and a powerful force that feeds back down the chain, driving and sustaining improvement in each. Top-performing companies take a proactive approach to strengthening their culture — starting with clear definitions of what “stronger” looks like, strategies to get there, and ways to measure and assess strength. New hire orientation, training, setting and enforcing high safety standards, and corporate messaging are all vital culture-building activities — but in an organization with highly evolved processes and systems, culture-building permeates every activity. The pay-off can be profound. Worksite safety improves because everyone helps identify potential areas for improvement. Workers employ safe behaviors every time, not just when there's an incentive or threat of punishment. Safety processes continuously improve because of a higher level of participation, and safety management systems become more effective because different functions and departments are united behind system values and goals.

### NOT EVOLVING FAST ENOUGH? TECHNOLOGY MAY BE THE MISSING LINK

Below is a simple depiction of a workflow that I've seen make a dramatic impact on safety performance for companies that follow it. The success of this model also depends on creating a culture that supports early reporting. This may start with near misses but evolves in top organizations to include regular observations from everyone. More people observing generally equates to better performance, because companies have ongoing information to drive safety processes proactively. They can take observations that are similar and negative, employ causal analysis techniques to identify the factors contributing to these observations,

and take corrective action to address system and process deficiencies — before a loss occurs. Tracking these actions through completion, they can also perform focused inspections to measure culture change.



Companies using this model frequently achieve performance that is the envy of their peers — yet even they can hit safety performance plateaus. The obstacle preventing further improvement on a path towards zero is usually the same obstacle that prevents companies from implementing this model at all: resources.

It's not a lack of understanding or will — safety professionals grasp the “why” of applying causal analysis and other quality management principles, increasing the collection and analysis of data, and evolving processes and systems to drive continuous improvement. The question, given tight budgets and staff already stretched thin, is “how.” Similarly, in the challenging economic climate, even senior executives who understand the bottom-line benefits of strong safety programs may resist investing resources to take performance up another notch.

The game-changer here is technology. Integrated, cross-functional, web-based management systems have proven their value in other areas of business for more than a decade, but it's only in the past couple of years that pioneers like UL

PureSafety have created comprehensive systems designed specifically for safety and related functions like training, occupational health, and case/claims management. In fact, customer feedback has driven a recent expansion of UL PureSafety's system to better support the model I've just described. For example, an intuitive new interface and newsfeed-style dashboard modeled after online social media networks allows employees, even anonymously, to report unsafe conditions and near-miss incidents in just a few keystrokes.

Automating many tedious, time-consuming tasks, and leveraging the "beyond human" capacity of computers to collect, sort and organize data, systems like UL PureSafety's make it possible to expand capabilities and implement systemic changes without adding staff. Specifically designed to support a proactive, system-driven approach, UL PureSafety's offering allows you to track and manage activity across the entire employee lifecycle — from early detection and incident prevention to corrective actions, injury and case management and return to work. As an end-to-end system, it reduces the cost and redundancy of maintaining multiple point solutions. Relatively inexpensive compared to other business investments, it not only delivers solid ROI through improvements in efficiency, productivity and reduced incident costs, it also gives safety professionals the tools to measure that ROI.

Whether it's UL PureSafety or another provider, the value of a comprehensive safety management system must be gauged via a live demo rather than written descriptions. However, the list below offers a quick "30,000 foot view" of the benefits such technology typically offers:

- 1. Supports culture of early reporting**
- 2. Facilitates meaningful knowledge exchange**
- 3. Brings more consistency to processes**
- 4. Automates administrative tasks**
- 5. Ensures more efficient use of resources (including guiding allocation decisions)**
- 6. Enables you to focus on outliers**

**7. Promotes sustainability**

**8. Helps programs evolve from reactive to proactive**

**9. Gets right information to the right people at the right time so they can act**

**10. Provides meaningful way to strengthen and measure culture change**

### FIRST STEPS ON THE CONTINUOUS IMPROVEMENT JOURNEY

Being an early adopter of cutting-edge safety management technology, and the more proactive, data-driven approach that such technology enables, offers enormous benefits. But it's important to emphasize that technology alone is not a "magic bullet." One of the first things we do when talking with a new company about our solutions is evaluate how well they're positioned to get value from a system like ours. In some cases, the safety processes, management systems, and culture have evolved in a direction that makes it easy to integrate our technology. If you're already tracking leading indicators and using them to help drive continuous improvement, we're just giving you the tools to do it faster, more efficiently, and more effectively. In other cases, however, the first steps toward achieving continuous improvement may be organizational more than technological.

### HERE ARE A FEW QUESTIONS WE ASK:

- **How proactive is your safety and risk management?** Leveraging the power of technology can provide enormous boost to programs that already have processes in place to conduct observations, track leading indicators, and make prevention and risk management more proactive. Technology can also help a program transition from relying on lagging indicators to a more proactive approach — but there has to be an organizational commitment to that approach.
- **Is your organization committed to continuous improvement?** Companies that see safety as a cost center and just want to do the minimum to remain compliant are only going to experience a fraction of the benefits that technology can provide.

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- **Do you want to measure everything you can?** Technology can automate the collection of data, centralize storage, and simplify analysis and reporting — but robust data analytics also requires significant human involvement, from generating initial data (e.g., input from observations, filling out a survey, etc.) to setting clear goals and having a strategic plan to use the data.
- **Does senior management support your safety goals?** We can help safety professionals make a very strong business case for investing in technology, but the ultimate value of an enterprise-wide system like UL PureSafety's depends on enterprise-wide buy-in, starting with management valuing and taking a sense of ownership over safety efforts.
- **Are safety leaders ready to lead the charge?** Change requires leadership, and even in perfect-fit scenarios, introducing new technology represents significant changes.
- **Are there any IT or process barriers?** Web-based management systems have eliminated most IT compatibility barriers. Nonetheless, it's important to look at how a safety management system will integrate with other technology you use. It is equally important to look at processes and systems you have in place and map out any adjustments that might be required.

If your safety program is committed to continuous improvement, or moving in that direction, it can also be quite valuable to get an outside perspective in evaluating where you are, how that compares to other industry leaders, and what next steps can move you forward. Whether you're already committed to implementing a comprehensive, web-based safety management system like UL PureSafety's or just beginning to explore what's available, I strongly recommend working with providers who have expertise in safety, and in your specific industry, not just in the technology they provide.

### ABOUT THE AUTHOR

**Todd Hohn, CSP** is Vice President of Strategic Resources at UL PureSafety, provider of innovative software and information solutions that empower and unite professionals enterprise-wide to improve workforce health, safety, and overall business performance. He is also a frequent presenter, facilitator and speaker on topics ranging from management accountability to efficiency and productivity. For more information, visit [www.puresafety.com](http://www.puresafety.com).