



empower better prevention

Table of Contents

Introduction	03
How did it get this complicated?	04
Best Practice #1: Shift ownership for safety to the line	07
Best Practice #2: Redefine how you measure safety success	09
Best Practice #3: Engage the front-line	12
Best Practice #4: Seek to learn, not to blame	15
Best Practice #5: Inspect, inspect	18
Best Practice #6: Be relentless on corrective action	21
Best Practice #7: Speak openly and often	24
Best Practice #8: Analytics: make your data work for you	27
References	30



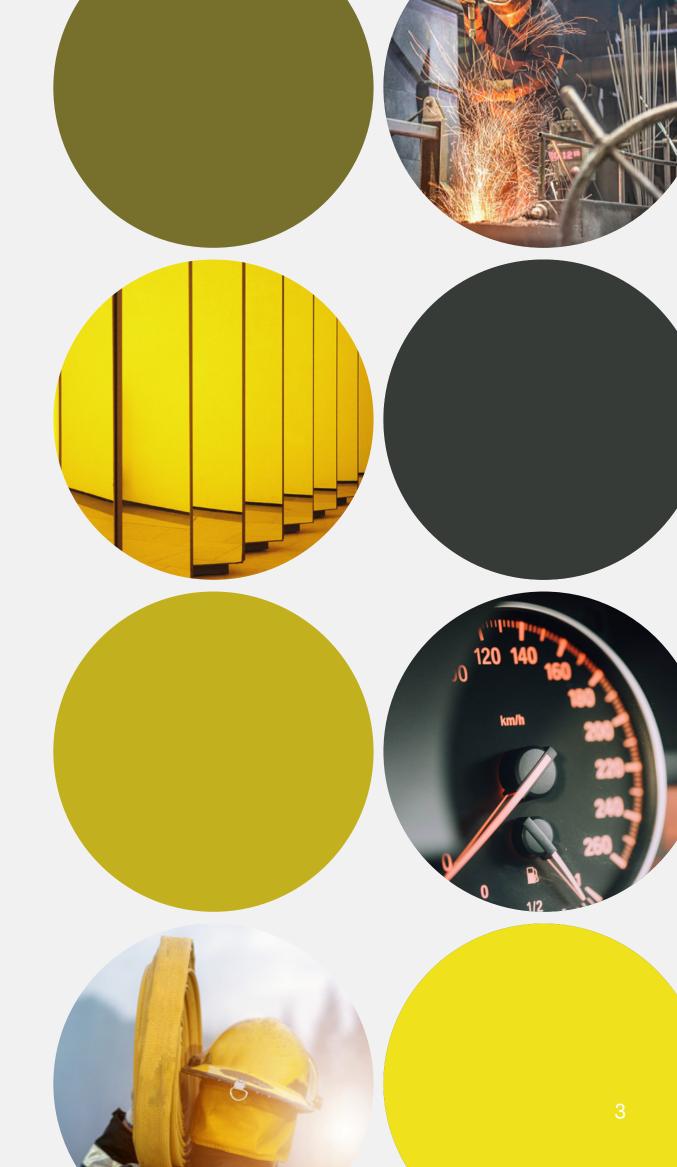
Introduction

If you've been tasked to lead your organization's safety program, you know that things can get very complicated very quickly. There's a mountain of things you need to know and processes that need to be set up to ensure your business stays in legal compliance, not to mention capable of controlling risk and preventing workplace harm.

For those new to safety, it can get pretty overwhelming. But even for more seasoned professionals, shrinking EHS departments and budgets are resulting in higher workloads and greater expectations falling on the shoulders of a remaining few. And it doesn't take much for things to spiral quickly out of control.

In these circumstances, it's natural to look for the next new safety idea, theory, or fad to help get your program back on track – the proverbial "silver bullet". In reality, for those struggling to regain control of their safety performance, going back to the basics is a far more effective strategy.

This guide provides a collection of best practices to help your organization simplify its approach to safety management. These recommendations developed by our team of health & safety experts are intended to point you towards some simple yet effective strategies that remove complexity and uncertainty from your safety program and contribute to more positive and sustainable safety results.



Chapter 1

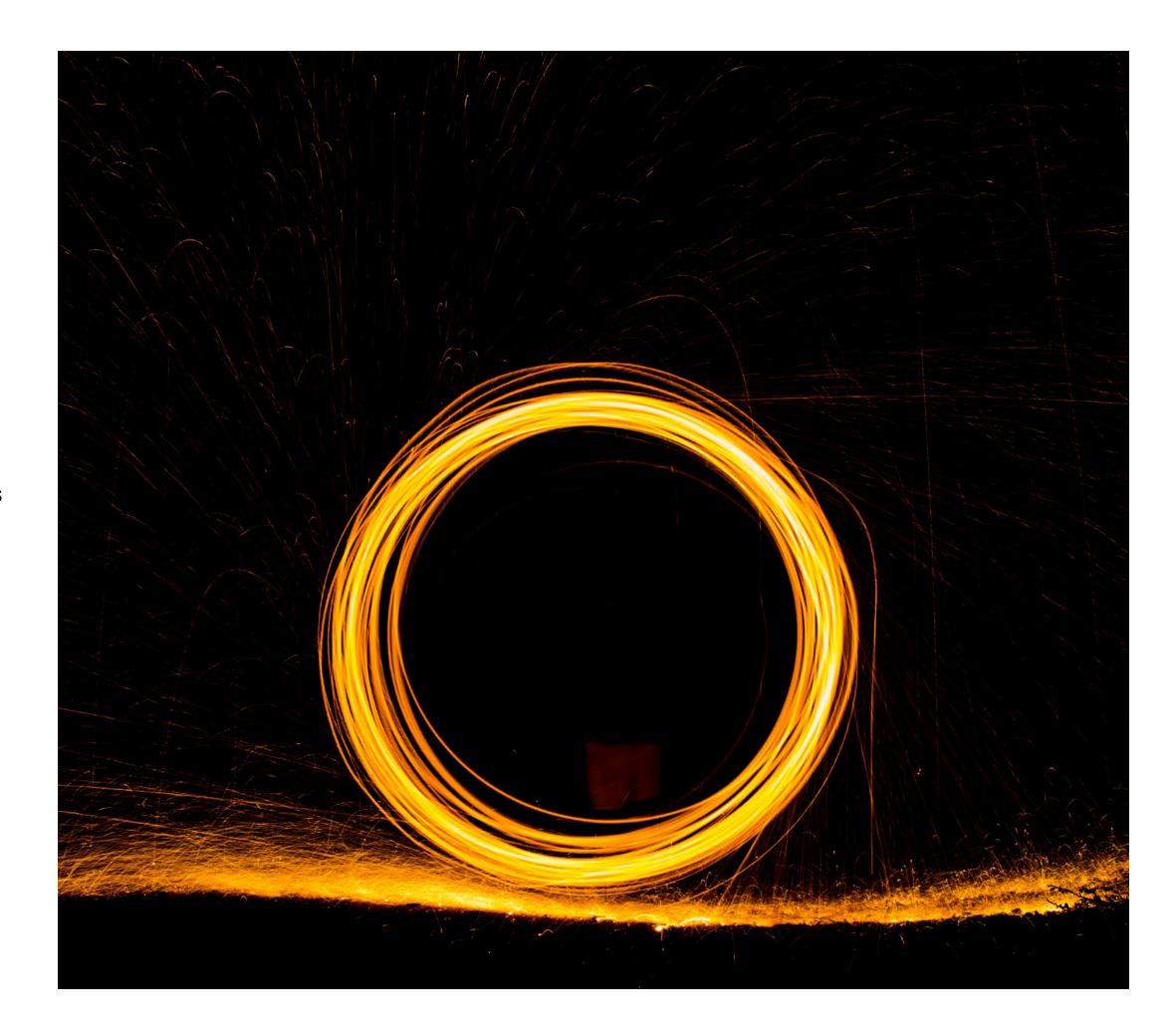
How did it get this complicated?

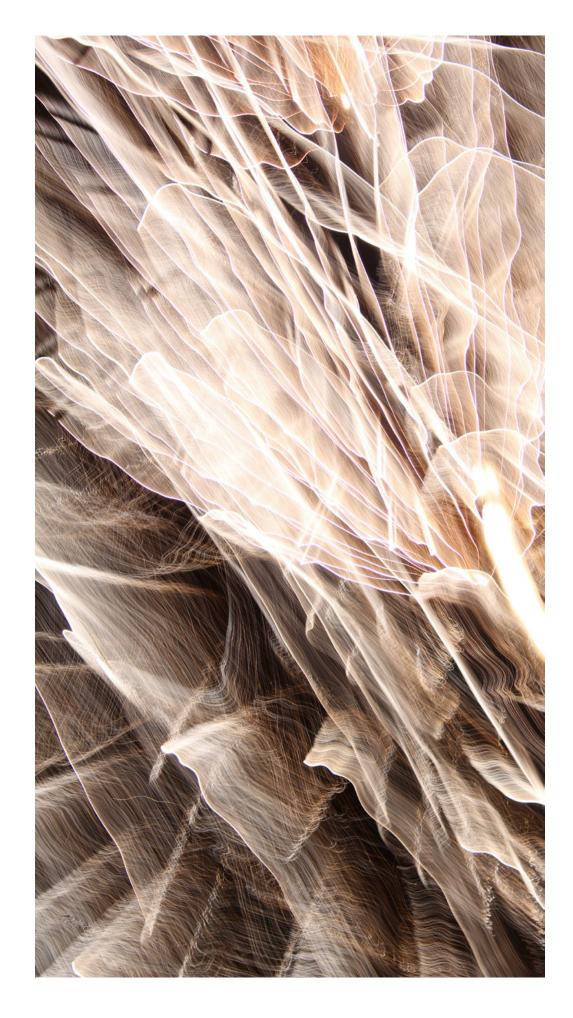


In a 2020 article¹, Peter Furst argued that our present challenges with safety management can be traced back to when the first safety standards were issued nearly 50 years ago.

According to Furst, due to the number, size and complexity of safety regulations introduced in the 1970s, most industries decided early on that safety needed to be handled by experts, freeing up line management to focus on running the business. This "bifurcation of responsibility", as Furst calls it, effectively removed operations from direct responsibility to manage safety. This decision led to safety experts being viewed as enforcers or "safety cops", responsible to conduct inspections, identify and control risks, and ensure that workers were following the rules. And unfortunately, this bifurcation also contributed to the idea that safety and production were in conflict. Sadly, that idea still exists in many organizations today.

As safety theory started focusing heavily on worker behavior in the 1980s, organizations





started to view their employees as "problems to be controlled". That view, along with increasing regulation that placed higher onus for prevention on employers, led many companies to design their safety programs predominately to manage legal liability. Procedures written in quasi-legal terms and training courses were intended to control worker behavior and show regulators that if something bad happened, it was because the workers didn't follow the rules, even after management told them to. Pretty soon, safety programs largely consisted of binders of specific procedures guiding how work was supposed to be done, and safety experts spent their time conducting tours to find and correct behavior that didn't conform.

When companies discovered more bad behavior, they simply added more rules, creating a bigger mountain of things to be managed. But as organizations became leaner, and EHS departments started to shrink, the responsibility to manage that ballooning program fell on the shoulders of a remaining few. And while all this was going on, safety performance started to plateau.

So, for organizations struggling to regain control of their safety program, what should they do?

The key to success lies not in more rules and complexity, but in re-focusing safety programs to be simpler, more inclusive, more engaging, and more sustainable.

Let's look at a few ideas.

Shift ownership for safety to the line



As mentioned earlier, one of the original sins when modern safety management was developed was that line management was removed from program responsibility. This separation resulted in the conflict between safety and production that still exists today. While organizations are often advised when designing their safety program to "communicate their commitment", it is equally if not more important that senior leaders clearly set a tone amongst the workforce that safety is owned by the business.

Line managers are responsible to manage safety along with all other responsibilities – production, quality, on-time delivery, cost, etc. Safety is not mutually exclusive to other aspects of the business. And safety experts aren't program gatekeepers but advisors to line management, helping them identify problems, resolve issues and build their internal risk competency. Those expectations should be incorporated into position descriptions and job offers to ensure they are understood early.

How technology helps: Providing line managers with a mobile-enabled EHS software platform that gives them access to simple, intuitive tools to manage safety and meet their responsibilities is extremely effective in removing resistance to this fundamental change in thinking.



Redefine how you measure safety success



Most organizations measure safety success by the absence of failure, or more accurately, the absence of accidents. Essentially, success happens when nothing happens. But just because we aren't having accidents doesn't mean we're safe. It's akin to assessing the safety of your driving only after you've arrived at your destination. Does the fact that you didn't crash mean you were safe on the road?

A key issue plaguing organizations is that they place far too much emphasis on injury rates as the absolute gauge of safety performance. But that approach is inherently flawed. If your business tells its employees, by what it measures and how it reacts, that accidents must be avoided at all costs, then that's exactly what it will get - no accidents. You'll post months of incident-free performance all while latent risk resides within your processes - waiting for the right moment to strike. Problems swept under the rug only serve to create a false sense of security.

Organizations looking to improve safety management must start by rethinking how

they define safety success. And those businesses need to shift from focusing squarely on avoiding incidents to instead focusing on how to build capacity to manage the risks that contribute to incidents.

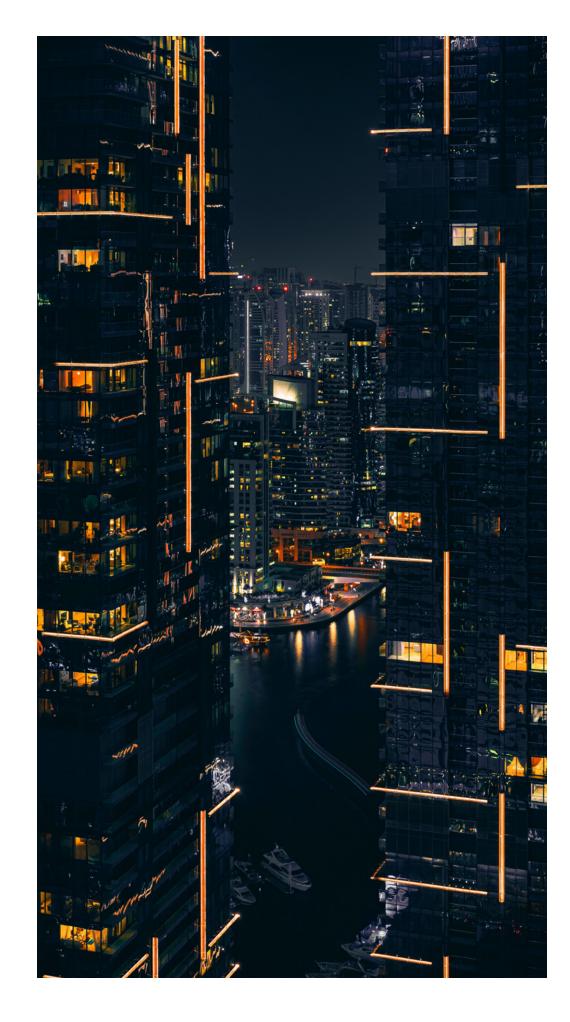
Incident rates are lagging indicators; they're backward-looking measures that aren't directly influenceable. Leading indicators, on the other hand, are measures we can control and directly affect our lagging metrics.

By selecting the right leading indicators to measure our organizational capacity to manage risk and the strength of our defenses – we're more able to directly affect the things that allow incidents to occur, and our incident rates to rise. In this sense, employers should start by selecting the right leading indicators. What issues contribute to your incidents that you need to focus on proactively? That might include:

- > % of safety training completed
- > # of safety observations conducted
- # of equipment inspections completed



10



of Days to close corrective actions

There is nothing wrong with tracking incident rates, as long as we acknowledge that we can't address them directly. By selecting the right leading indicators to measure, we can act early to address risk before it can contribute to incidents later on. But beyond what measures you track, you also need to consider how to make their collection and calculation as efficient as possible.

How technology helps: Businesses can drastically simplify their ability to collect and monitor critical leading and lagging indicators by adopting an EHS software solution. These platforms offer users the ability to easily capture key metrics via desktop or mobile applications. By integrating these solutions with HRIS platforms, working hours can be seamlessly imported into the solution to calculate incident rates instantaneously, reducing administrative time and effort to crunch numbers.

By monitoring metrics in real-time, organizational leaders will be better able to align priorities and resources to the operational issues that are contributing to poor safety performance. More importantly, the ability to track key leading indicators on visual dashboards also helps the business detect signs of operational "drift" – where performance starts to move in the wrong direction – allowing leaders to respond to warning signs early before they can contribute to incidents.

11

Engage the front-line



It's not uncommon in organizations with low safety maturity for front-line workers to view health & safety as entirely the responsibility of management. And this is often because management fails to effectively engage workers in the H&S process.

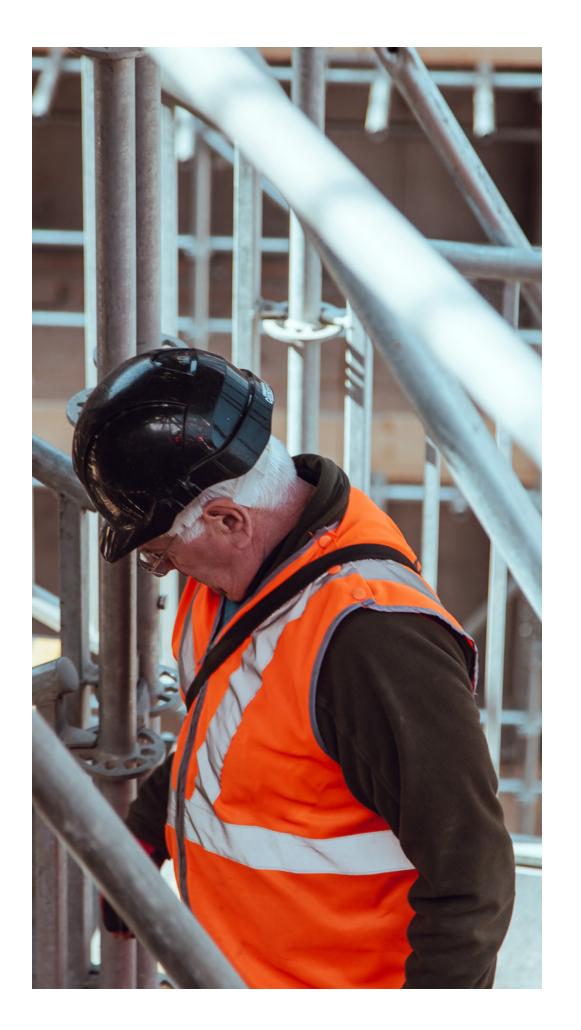
With limited resources, management cannot possibly detect and respond to every issue or risk on its own to prevent injuries in a sustainable way. They need the assistance of the workers closest to the risk to let them know what's happening moment by moment, where attention needs to be focused, and to empower these workers to take action when required. If the workforce feels excluded from the H&S program, they will not feel accountable to help create and sustain that safe work environment.

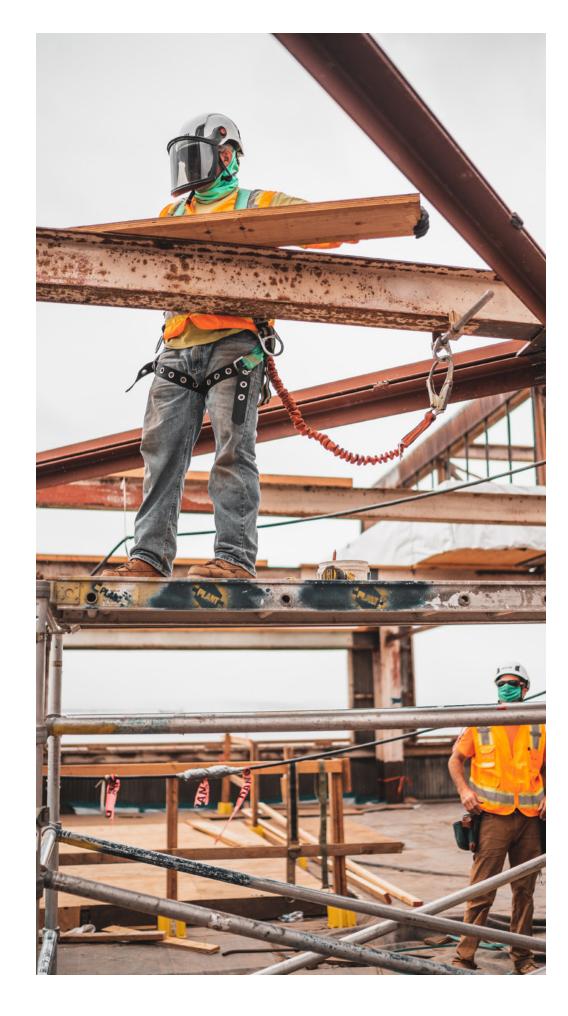
The research speaks for itself. In 2016, Gallup conducted an extensive meta-analysis of health & safety data involving over 200 organizations and nearly 2 million employees². The study found that workplaces with the highest levels of employee engagement

"Safety isn't about checklists, or audits or creating more rules. It's about winning hearts and minds. And doing so requires that we first understand what makes people do the things they do. This happens when we become people-focused."

Dr. Andrew Sharman

Principal and CEO RMS Switzerland





experienced up to 70% fewer workplace injuries than those with lower front-line engagement.

As stated by safety expert Todd Conklin, better safety performance starts with changing our view of workers from problems to be controlled to problem-solvers. Employees at the "sharp end of the stick" – those interfacing with risk on a daily basis – have extensive knowledge of the hazards encountered during work and how best to control them. It's therefore critical that employers find ways to allow these workers to not only report when critical defenses are lacking, but also to share their ideas and expertise to help build greater organizational knowledge on how to effectively address risk and keep people safe.

How technology helps: Mobile-enabled

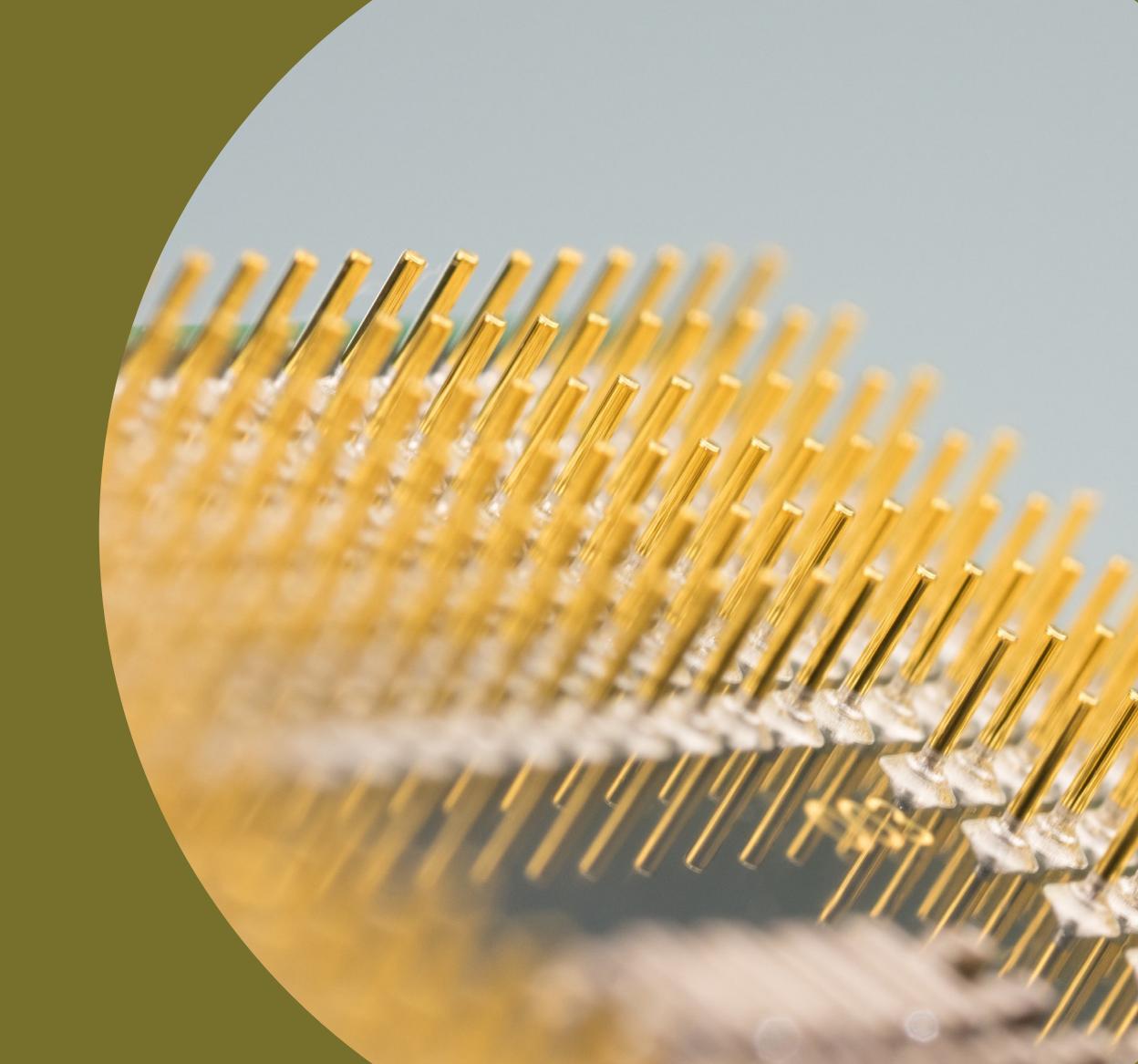
EHS applications are becoming a go-to solution for many organizations looking to remove barriers and improve worker engagement, especially as operating footprints grow and businesses rely ever more on self-directed teams. With these solutions,

firms can simplify some of their most common safety activities, giving workers the ability to easily report events and observations, complete tasks, or even source information they need to manage risk in their work, anytime, anywhere. These solutions remove time-lag in sharing information, allowing for more immediate responses and reducing administrative burdens associated with many common reporting tasks.

It's important to remember that not every worker is naturally open to technology. The key to successful worker adoption of mobile tools is simplicity: the solution needs to be simple to use, intuitive, and offer a user experience that's personalized for that worker. Simplicity will also reduce training time, improve adoption and ensure maximum value for your investment. By empowering your front-line with these tools, you can accelerate data collection efforts and leverage this information to make better decisions on where to focus your efforts to maximize safety results.

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Seek to learn, not to blame



In his best-selling book "Black Box Thinking"³, Matthew Syed offers an interesting take on managing when things go wrong.

The B-17 was an aircraft used heavily by the US Army to conduct strategic bombing raids over Germany during World War II.

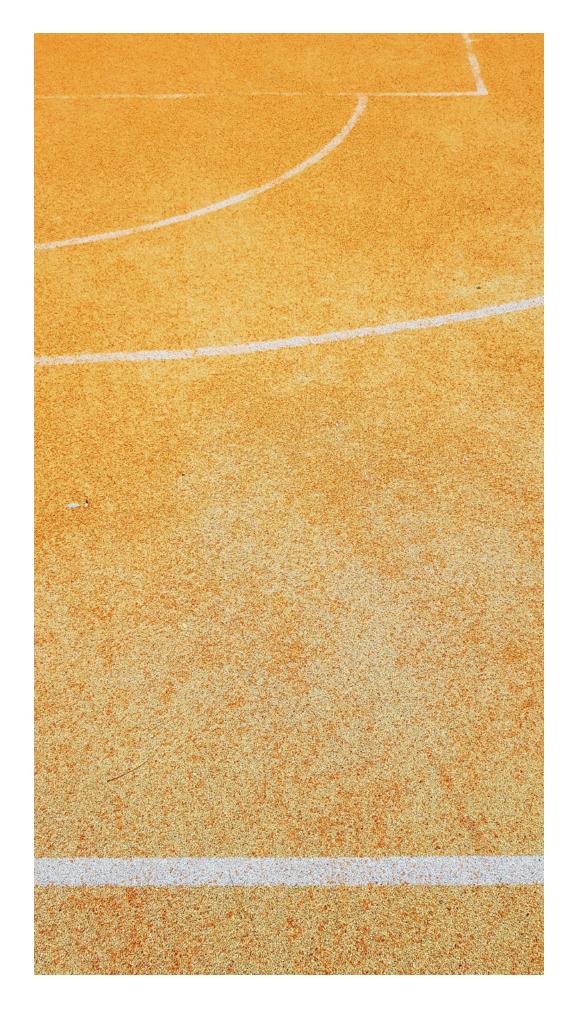
Syed recounts that during the 1940s, the B-17 was involved in a "series of seemingly inexplicable runway accidents". At first the US Army, convinced planes were crashing due to pilot error, focused intently on pilot training as a means to reduce events. But nothing changed.

It was only later that the Army discovered that these crashes had less to do with pilot error and more to do with systems design. They found that the levers that controlled the aircraft's landing gear were not only the exact shape as the levers controlling the wing flaps, but they were also positioned side-by-side on the instrumentation panel. When attempting a difficult landing, pilots were inadvertently pulling the wrong lever, retracting the wheels instead of the wing flaps and causing the

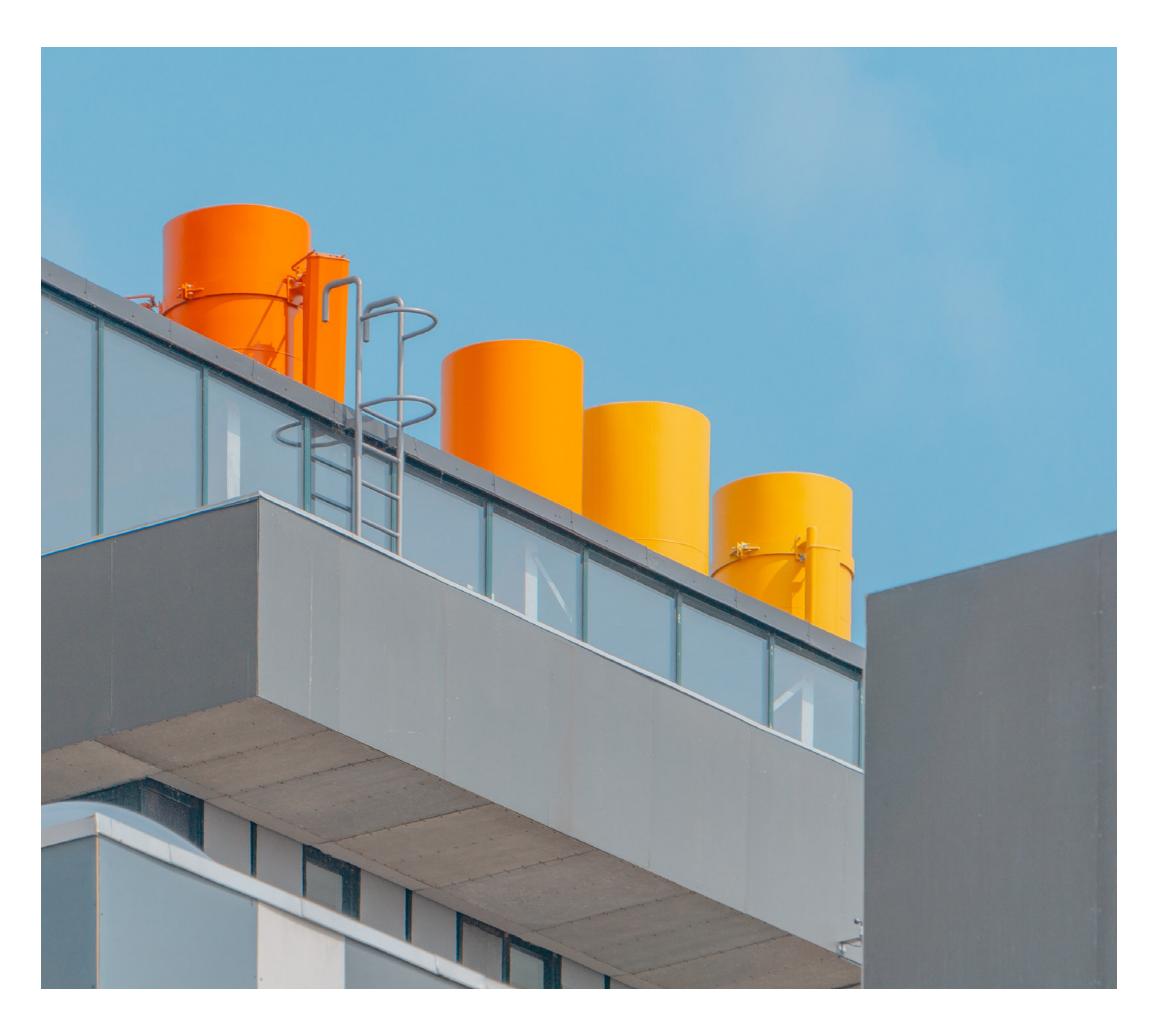
plane to crash. The Army re-designed the levers to look different, and the crashes stopped immediately.

What this story reveals is that we all have an inherent bias when we look at error. We tend to overestimate personality factors and underestimate situational factors to explain observed behavior. In other words, we focus more on why the person involved didn't act the way they were supposed to and pay much less attention on the circumstances that may have influenced them to act that way in the first place.

Improving safety performance requires navigating a delicate balance between learning and blaming. You can either learn from an event, or assign blame for the event, but you can't do both. Jumping to issue discipline might feel like the right thing to do, but we need to recognize doing so may come at the cost of understanding how to improve our systems to prevent the next event. While "blaming individuals may be emotionally more satisfying than targeting systems"⁴, it is very



16



often less effective.

It's why incident investigations must be approached with the primary goal of learning where weaknesses in our defenses exist or could develop, and focus our energy on addressing those gaps. Discipline should be reserved for only the most egregious cases. Issuing discipline unfairly will erode workforce trust, stunt learning, and may damage the engagement needed to manage risk sustainably.

How technology helps: Many software solutions offer organizations expansive capabilities to complete root cause analysis (RCA) using methodologies aligned to the needs and expertise of the business. As vendors continue to expand their RCA tools, through organic product development and partnerships with best-of-breed platforms, businesses will have access to better tools to help them truly understand where their injuries are coming from and what they can do to resolve them.

Inspect, inspect, inspect



If we were to drill down into incidents across many companies, we'd likely see that they were either directly caused or indirectly influenced by something in the workplace. A missing guard leads to a worker's hand becoming entrapped in machinery. Pooling water from a leaking pipe leads to a slip & fall. Damaged equipment causes a frustrated worker to pull too forcefully resulting in a sprain. In most cases, the factors contributing to incidents are visible to us in plain sight, if only we take the time to look.

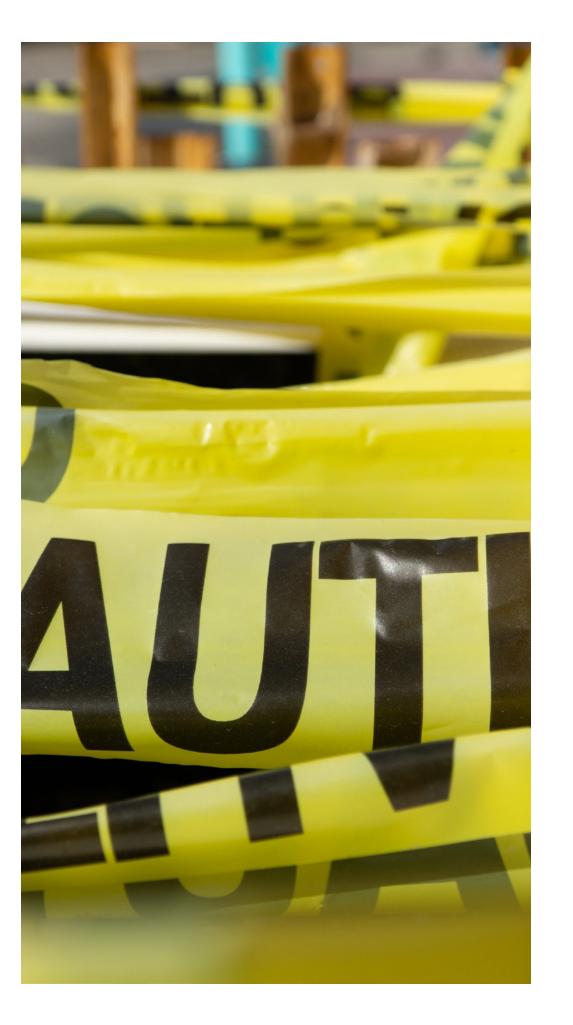
Unfortunately, many organizations lose focus on the importance of workplace inspections as an effective means to address the immediate and underlying causes of incidents. Yet doing so would reduce the chances of injuries, keep incident rates under the regulator's radar, and ensure critical deficiencies are fixed long before an inspector finds them and issues a citation.

Inspections are also a perfect opportunity to engage the workforce in tangible actions that support the H&S program. These checks

"Instead of comparing unsafe vs. safe behaviors, we should be leveraging our data, including EHSQ and non-EHSQ, to help give us a perspective of what events are most likely to occur, why and how."

Sean Baldry, CRSP

Product Marketing Manager Cority



19



offer the chance to pair front-line workers and management leaders, helping build relationships, exchange ideas, cross-train and demonstrate shared commitment toward injury prevention.

It's best to start small. Work with a crossfunctional team to divide your workplace into manageable sections to inspect, and build a recurring schedule with individuals assigned in teams. Review the results of inspections with your workforce, perhaps at a monthly safety meeting, to solicit ideas on possible solutions to found problems. Post inspection results in a common area to keep your workforce apprised on progress.

How technology helps: EHS software helps employers simplify compliance management by automating inspection assignments to reduce the effort to schedule workplace checks and follow-up on outcomes.

Automated notifications can be configured, alerting workers when inspections are coming due or when missed so immediate action can be taken. Visual dashboards allow leaders to

assess inspection performance at-a-glance, and even easily drill down to better understand issues at a local level.

Leveraging mobile apps, you can create standardized inspection checklists to drive better consistency, removing possible inspection bias and ensuring that all inspectors assess critical items in a similar way. And the ability for inspectors to auto-create corrective actions right from their mobile device as they go reduces post-inspection administrative burdens and eliminates the lag time between when an issue is found and when it can be actioned.

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Be relentless on corrective action

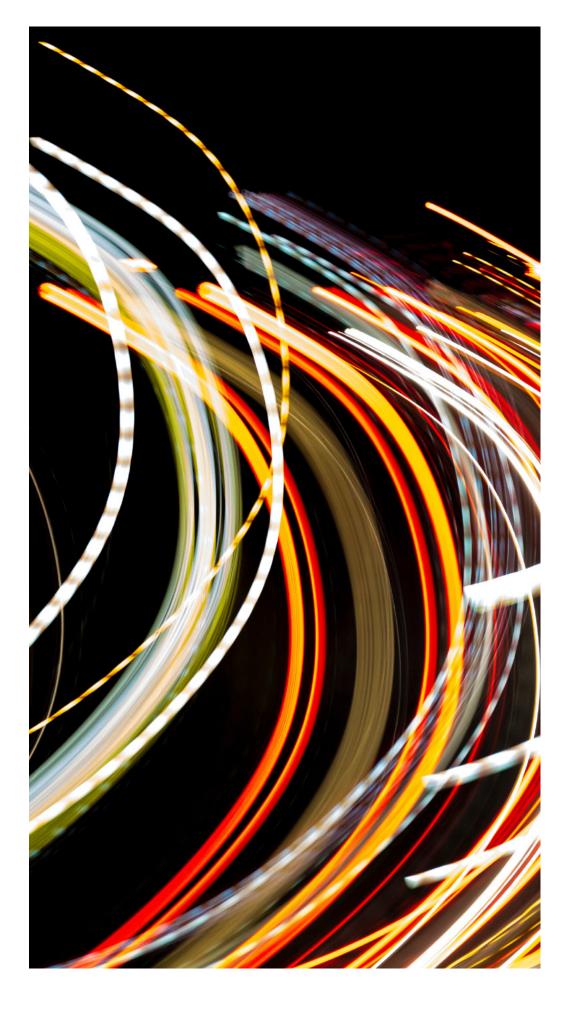


The winds of change appear to be shifting with respect to safety enforcement. In the United States, the recent change in presidential administrations is ushering in a more aggressive approach to regulatory compliance. More frequent inspections and higher fines mean that one poor encounter with an inspector could easily result in a painful financial impact to your business.

It's generally accepted that knowing that something is wrong and failing to act is much worse than simply being unaware of the issue in the first place. In fact, that's the rationale for OSHA's willful citation – that you knew (or ought to have known) that a situation existed that could result in serious harm and nonetheless, you failed to take reasonable steps to address it.

Taking the time to understand where a gap in your safety defenses exists is only truly valuable if you are committed to doing something about it. That's why any organization looking to improve safety results needs to be committed to ensure corrective actions are completed on time and on budget.





It starts with management creating a "culture of accountability" – an understanding that everyone is empowered to take action to address problems, and that once an individual is assigned to an issue, they're expected to get it done. For managers, it means providing the tools and resources needed to complete the work, while also monitoring progress, removing barriers and knowing when to escalate issues up the chain-of-command. For workers, it's about knowing and accepting their responsibility to complete assigned tasks, and reaching out early for assistance if they run into obstacles.

Don't forget – your organization's expressed commitment to "fixing problems" will also impact the willingness of your workforce to bring issues forward - which is absolutely critical to address safety risk proactively. Failure to show sustained focus on closing corrective actions can cause the well of proactive observations to "run dry", compromising your ability to detect gaps that lead to harm.

How technology helps: Most EHS software platforms offer integrated actions management solutions that allow organizations to immediately create and assign corrective actions right from any incident, hazard report, or inspection. Automated alerts, through email or text, can notify employees the moment a corrective action is assigned to them, and with mobile applications, these workers can immediately access and update progress on their assigned tasks right from their mobile device. These real-time updates ensure that the data leaders use to make decisions is always accurate. Escalation workflows can be leveraged to immediately alert managers when a corrective action lapses beyond its due date, allowing the business to drive better accountability and re-assign resources if needed.

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Speak openly and often



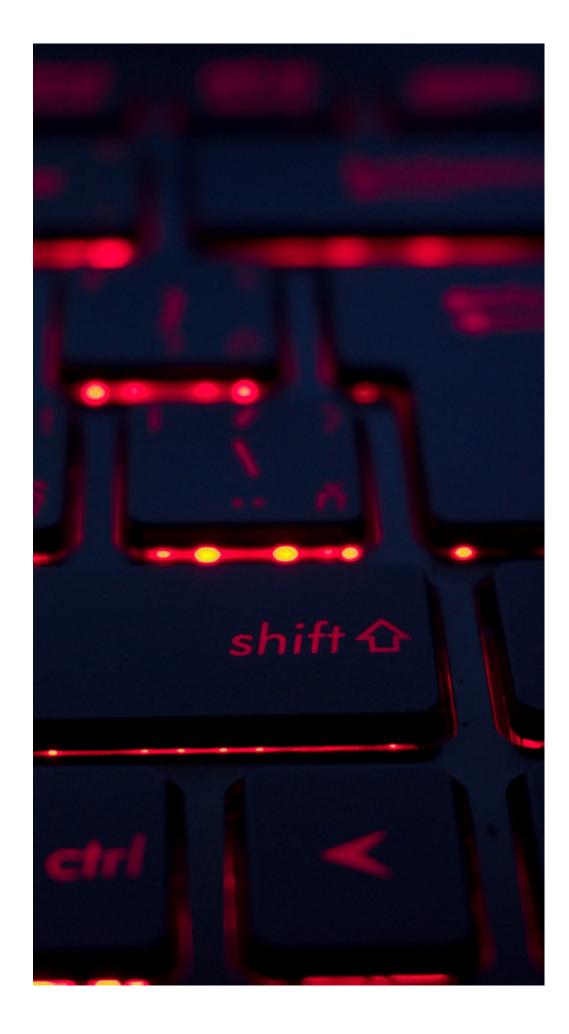
In a 2016 article entitled "Safety from the shadows"⁵, Kevin Cobb explains that employees in any organization exert an informal social power that influences the perceptions, ideas and commitment of their peers. As a result, when workers feel marginalized, not listened to or neglected, they can exert negative social power that can undermine key company goals, including safety efforts. This is why engagement is so important.

But beyond giving workers opportunities to engage and make their opinions known, Cobb argues that organizations looking to improve safety performance must trust workers with more data, not less. Often, in weak cultures where workers actively exert negative social power, it's often because they feel that management is hiding something from them; that workers aren't getting the real picture of what's happening.

Sharing data frequently and transparently allows workers to assess for themselves the state of business, see how their efforts



25



contribute directly to a safer workplace, and encourages them to get more involved.

Better communication promotes a narrative that there are no secrets and that management is open to be challenged and held accountable. This will build greater workforce trust which strong safety cultures require to thrive.

How technology helps: EHS software can simplify safety communications by enabling the faster flow of information across the enterprise, irrespective of the operating footprint. Configured reports can be authored and automatically distributed to key stakeholders on a selected frequency, eliminating the manual effort to pull information together, and supporting a consistent and accurate message at all levels.

The same dashboards that leaders use to track key metrics, priorities, and corrective action status can be shared with front-line workers right on their mobile device, allowing them to monitor organizational performance in real-time. This transparency allows your business to demonstrate that employee

concerns aren't falling on deaf ears, and helps workers hold leadership accountable to the things they've committed to.

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Analytics: make your data work for you



While many organizations maintain massive repositories of historical safety data, their reliance on manual data analysis means that much of the potential insights that could be gained from this information and applied to their safety program is left unexplored.

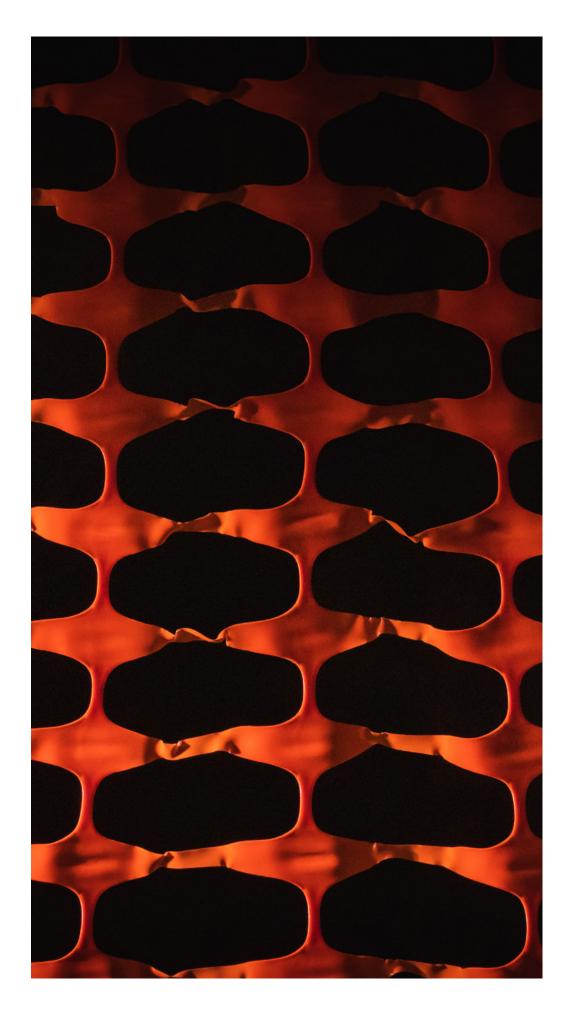
Why? Much of the safety data employers collect is unstructured – organized in no particular manner, usually text-heavy with names, dates, facts and long narratives. That lack of structure makes the data particularly challenging to analyze by computers when compared to more structured formats.

Consequently, the only way to glean insights from this data is through timely and cost-intensive manual analysis. In the absence of data, safety decisions are susceptible to cognitive bias and political agenda, leading to actions that don't effectively address the key EHS needs and results in a lot of wasted dollars.

But if organizations could automate this analysis, they would be able to unlock much of the value from this stored data and use it to



28



drive better decisions and safety strategy.

How technology helps: Advanced business intelligence and analytics features offered in enterprise EHS software is changing the safety game, allowing firms to deploy safety programs that are more strategic, intelligent and predictive. Machine learning, artificial intelligence and natural language processing (NLP) are enhancing the user's ability to quickly draw insights from their collected metadata and support more preventive decision-making.

NLP enables organizations to easily decode and interpret massive amounts of unstructured data – which most safety data is – at scale and integrate this information in machine learning algorithms to produce predictive models that help identify where incidents are most likely to occur, enabling earlier interventions. In fact, one study⁶ found NLP was able to detect injury attributes in over 2,000 reports with 95% accuracy when compared to manual analysis, but completing it in only a fraction of the time.

Automating data analyses is providing employers with faster and more extensive insights to guide safety strategy while allowing resources to be deployed where they're needed most.

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Final Thoughts

Simplifying safety management requires your organization to be open to new ways of thinking. But instead of trying to find the "next best thing" to resolve all your safety program challenges, it's best to start by refocusing on the basics.

Developments in EHS technology are making it easier to reimagine a better way to manage safety, making for a more data-driven, engaging, and effective way to keep your people safe and your business growing.





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