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OPERATIONS MANAGEMENT

7 Ways to Improve Operations Without Sacrificing Worker Safety

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When I ask corporate leaders why they are committed to preventing serious injuries and deaths among their workers, most say they care about their employees and don't want to see anyone hurt. They'll also note that "safety pays" in reducing costs, or admit they fear reputational damage following a significant incident at their company.

In my experience, these rationales rarely lead to significant changes in workplace safety and the prevention of serious injuries and deaths. Underneath it all, many business leaders have an implicit but unfounded belief that, while it is necessary to reduce workplace injury risk, there is a trade-off between profits and the expenditures necessary to keep workplaces safe. One example of this sticks in my mind.

During my years at OSHA, where I served as the Assistant Secretary of Labor from 2009 through the beginning of 2017, I received several reports of safety system failures at DuPont facilities. I watched with concern as the company, under pressure from activist shareholders to increase profits, cut costs and let its safety program deteriorate. Needed repairs and upgrades were delayed, worker training postponed, and risk assessments overlooked. The culmination was an incident at an insecticide plant in LaPorte, Texas, where, as a result of a basic process safety management failure, an extremely toxic chemical—methyl mercaptan—was released and two workers were overcome. With inadequate equipment, others rushed in to save their colleagues. In all, four workers were killed.

We fined DuPont a few hundred thousand dollars—a high penalty for OSHA but petty cash for DuPont. To get management's attention, I issued a statement declaring that "these four preventable workplace deaths and the very serious hazards we uncovered at this facility are evidence of a failed safety program."

It worked. CEO Ellen Kullman came to see me and promised a top to bottom review of the DuPont safety program. I was pleased with our meeting, feeling like she had made a real commitment. And then, less than two weeks later, she stepped down.

Her successor, Ed Breen, was quoted as saying, “as we confront a challenging environment, [Kullman] and the management team already have taken actions to accelerate cost reductions. Looking ahead, we will continue to drive productivity, and we plan to conduct a deep dive into the details of our cost structure and allocation of capital to ensure we deliver appropriate returns for shareholders.”

When I read DuPont CEO Breen’s words “accelerating cost reductions,” my heart sank. I thought immediately of BP and the other industrial giants whose “accelerating cost reductions” had disastrous consequences. These kinds of statements speak to a leader’s choice of values, and a failure to understand the relationships between a safe work environment and operational performance. They convey to workers what’s really important, and they create ample context for inadequate safety focus lower down the organization.

It doesn’t have to be this way. Companies can be successful and safe at the same time. The reality is that virtually all workplace injuries are preventable, and safety management and operational excellence are intimately linked. Injuries and catastrophic events, in addition to being tragic, are evidence that production is not being managed correctly. Improved operational performance will result in fewer injuries.

Here are some steps CEOs, executives, and boards can take to accomplish just that.

Start at the top.

From the CEO down, the message should be, “We care about safety because we care about you — doing it right means no one gets hurt.” Take safety as seriously, if not more seriously, than anything else you do.

One former CEO who exemplifies this message is Jim Gallogly, who was hired to be CEO of LyondellBasell, one of the world’s largest plastics, chemicals and refining companies, in 2009. When Gallogly arrived, the firm was in bankruptcy; his job was to return it to profitability (which he did). At his first meeting with employees, however, he announced that he wasn’t going to begin by talking about the firm’s financial challenges. Instead, the new CEO wanted to focus on something far more important: his absolute commitment to safety. He subsequently included a report of the firm’s safety performance in every earnings call, too.

Aside from prioritizing safety with employees and investors, corporate leaders need to be familiar with the nature, extent, and potential of the major risks — and the risk mitigation plans — associated with their facilities. Many executives require every serious injury to be reported to them immediately. At Cummins, Inc., for example, serious incidents are reported directly to the COO and communicated to business unit vice presidents as well. They are then reviewed by the company’s Manufacturing Leadership Council.

When operational staff knows that the C-suite will be on the receiving end of such reports, and that they will be analyzed in detail, it reminds mid-level management of the importance of risk reduction and injury prevention.

Use the right incentives.

The term "safety culture" is misleading because it suggests organizations have multiple cultures: one for safety, another for production, and perhaps others for quality and for sales. In reality, each company has its own organizational culture, and all too often, when production needs suddenly to increase, production takes precedence over safety.

At the safest, most successful companies, safety is what the firm does – and what the firm is at its core – not something that is separate from operations. In fact, a study of 19 manufacturing firms on quality, productivity, and economic performance, along with subjective data on how workers and managers felt about their safety program, found that:

"As safety deteriorates, product quality and plant performance, based on internal and external measures, suffers. There is more scrap, more rework, and employees are less involved. Such outcomes are in line with the core concepts of total quality management which would suggest that employees who do not feel safe in their jobs are not likely to do their jobs well…. Safety and operating performance measures should be viewed as in concert with each rather than as competing entities."

Operations managers must get the message, though direct comments, performance reviews, and bonuses, that safety is a central part of their jobs. I have seen far too many employers who fail to penalize managers when their safety management systems are failing but their production numbers are good. LyondellBasell, for example, has a policy that makes it clear that safety is no less important than profits. According to Jim Gallogly, no matter how low the OSHA recordable injury rate, if there is a serious incident – a fire, a chemical release, a worker is seriously hurt – no manager gets a bonus.

Don't blame workers for injuries.

Workers are humans and humans make mistakes. No matter the job, at some point a person will get tired, bored, or distracted. Because of this, errors are inevitable. Well-functioning safety programs understand this and have multiple backup systems to ensure that mistakes do not result in injuries or deaths.

It's also worth remembering that serious events are almost always caused by multiple factors — not the actions of one person — and that the prevention of these events is most effective when many indicators are considered together.

The most effective path to preventing injuries is to consider human errors as the consequences, rather than as causes, of operational failure. As James Reason, the organizational psychologist who authored the seminal book Managing the Risks of Organizational Accidents, wrote, "(w)hen an adverse event occurs, the important issue is not who blundered, but how and why the defenses failed."

Rethink how you think about injury rates.

Injury rates, often called "OSHA recordables" are important metrics, in that they reflect the very real experience of your workforce. At the same time, injury rates and reports of specific incidents are what are known as lagging indicators. While they identify problems that often need immediate attention, they do not adequately evaluate a firm's safety and health management system.

This may be the opposite of what many CEOs hear from their safety professionals. For many years, it was a common belief that preventing minor injuries will also prevent the most serious ones. In fact, the causal chains that lead to most serious and fatal injuries are quite different than those leading to the majority of "OSHA recordable" injuries (#4 talks more about these). This is especially true in the high-risk sectors where a single event can be catastrophic. Famously, BP executives were on the Deepwater Horizon drilling rig the night before that horrific explosion, giving its workers an award for their low injury rate.

That said, you should set concrete goals for injury rates at your company. But instead of focusing on a lower rate, I would recommend setting an aspirational goal of zero injuries (while making it clear that reporting injuries is an absolute requirement). The undesirable premise underlying the goal of a lower injury rate — versus aspiring to no injuries — is that it is OK for some workers to get hurt, as long as fewer get hurt than before.

Focus on leading indicators.

To make substantial progress in injury prevention, companies must select a set of indicators that measure progress toward that firm's chosen goals. These are called "leading indicators" because, unlike lagging indicators like recordable injuries, they are predictive of fatalities, serious injuries, or events that may have catastrophic consequences.

The measures could involve hazard identification or abatement, incident investigations, or the time it takes to close out of recommendations, among others. Each firm needs to select or develop its own, appropriate to its functions and products. Start with a small number and then add more as your program matures.

The pharmaceutical manufacturer Allergan, for example, tracks "good observations," reports that include near misses, unsafe conditions, or suggestions for reducing risk. Beyond providing a mechanism for workers to alert management to problems, this metric encourages a continual focus on risk reduction. Good observations are a takeoff point for another measure the company tracks: speed in which serious or high gravity hazards are addressed. Simply receiving the observations is not enough, of course; eliminating the serious hazards are what is important.

Whatever the metrics, top managers should use them to measure the evolution of their safety management system (see #5 below), and they should be an integral component of managerial performance payments. The performance of senior executives at Dow Chemical, for example, is evaluated using leading safety indicators, not injury rates.

Embrace a safety and health management system.

Managing for safety requires managers to implement a systemic process to find and fix workplace hazards before workers are hurt. Generically these programs are called Safety and Health Management Systems (SHMSs) or Injury and Illness Prevention Programs. They all involve an iterative, continual improvement process that have as their operating principle the Plan Do Check Act cycle (or the Plan Do Study Act cycle, sometimes called the "Deming Wheel") widely in use today.

In order to be successful, an SHMS must involve support from leadership; worker participation (including the acting involvement of a union if one present in an organization); hazard identification, assessment, prevention and control; opportunities for education and training; and regular program evaluation and improvement.

SHMSs should also include protocols for investigating incidents that are sometimes called near misses or close calls. These incident investigations, conducted with the participation of managers, workers, and safety experts, examine the chain or root causes that led to the incident and then develop recommendations for preventing them in the future.

Welcome a regulator as a "cheap consultant."

A visit from an OSHA inspector often triggers fear, if not panic, especially among inexperienced managers. But many OSHA inspections lead to substantial improvements in a firm's operations. I was amused to hear an executive at one of the nation's largest chemical manufacturers tell me that he looked at OSHA inspections as an inexpensive consultant, since our fines were always less than he would have to pay an industrial hygienist to do that same inspection for him.

In fact, most firms actually benefit from OSHA inspections, and I'm not just saying this because I worked there. According to researchers David I. Levine and Michael W. Toffel, OSHA's random inspections of high hazard establishments result in a 9% reduction in injuries that triggered workers' compensation claims in the four years following the inspection. On average, each inspection reduced employer expenditures for wage replacement and medical costs by $350,000. Further, not only do the OSHA inspections prevent injuries, "they cause no discernible damage to employers' ability to stay in business and no reductions in sales or credit ratings… Nor did we identify any effects of workplace inspections on wages, total payroll, or employment."

Today and every day in the future, corporate leaders need to reassess what safety means and how their company can achieve it. They need to recognize that safety is a value proposition, that safety management and operational excellence are inextricably linked. If you ask the CEOs of companies who take this seriously, my bet is you won't hear the same old tired line that "safety is a priority." They understand that safety is not a priority — it is an essential precondition of their work. It is a fundamental component of their operating culture. Safety, ultimately, is at the core of what they do.

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