



How to Assess the Role of Company Culture in Creating Safe Workplaces

Co-written by Tom Wilson and Jared Smith

In the 1930s, research by Herbert William Heinrich revolutionized thinking about workplace safety with the conclusion that “88 percent of all industrial accidents are caused by the unsafe acts of persons.”¹ In the 80 years that followed, managers have applied Heinrich’s theory more or less “uncritically.”² Unfortunately, those ideas leave out an important element in workplace safety – perhaps the most important element: company culture. The culture of an organization determines to a large extent the level of risk employees are willing to take in performing tasks, which can directly impact the number of workplace incidents.

For EHS directors in industries that utilize a significant number of contractors – such as oil and gas, construction, facilities management, and others – this presents a difficult challenge. Each contract brings its own company culture to the job. How risk tolerant or risk averse is that contractor? How much of a risk does the contractor pose? How can an EHS director assess that factor?

This report explores the topic of risk tolerance and its affect on workplace accidents in two parts. The first part is a personal story by published author and professional speaker Tom Wilson, who was involved in a horrific workplace accident, one that speaks directly to the issues of workplace culture and risk tolerance. The second part, by Avetta cofounder Jared Smith, discusses approaches companies can take to assess risk tolerance both internally and among its contractor network.

¹H.W. Heinrich, *Industrial Accident Prevention: A Scientific Approach*. McGraw-Hill, (1931).

²Thomas A. Smith, “What Dr. Deming Can Teach Us About Safety Management,” June 9, 2014, EHS Today.
<http://ehstoday.com/safety-leadership/what-dr-deming-can-teach-us-about-safety-management>

Moments that Matter

by Tom Wilson

In November 2008, I was involved in a tragic small plane accident that left seven people dead and me very badly burned and barely alive – the only survivor. How I was able to escape the plane while on fire and eventually get rescued is told in greater detail in my book, *Moments of Impact*, which examines the factors that led to this terrible incident.

The accident occurred under unsafe conditions that could easily have prevented our small plane from taking off in the first place. The pilot warned us that it could be risky, telling us minutes before starting the engines, “We are going to have to do some low-level flying because of the weather conditions.” He then gave each of us an opportunity to reconsider our decision to travel that day: “If anyone has a problem with that,” he said, “tell me now and I will let you off.”³

We each had the opportunity at that moment to choose the safer option, including the pilot. Yet none of us did. Why not?

There were numerous reasons the pilot and each of us passengers chose the risky path over the safer one. There was the pressure to get to our destination so we could relieve a crew in the remote Canadian wilderness and allow them to return home to their families. We had the false impression that an accident like this couldn't happen to us. We knew the pilot had a great deal of experience on the route and we trusted his decision to fly.

At the same time, the flight was allowed to proceed despite numerous warning signs, as noted in a follow-up investigation conducted by the Transportation Safety Board of Canada. For example, the report asserts that “Beliefs, combined with competitive pressures and the difficulty of enforcement, lead to situations where some pilots and operators are willing to take risks by flying in marginal weather conditions. Left unchecked, these practices become accepted norms and are adopted by new pilots.”⁴

In the end, the terrible accident was the result of many factors, including unsafe behavior ignored by the company, the pressure to meet objectives, the false sense of confidence based on prior results, and others that I document in my book. Each of us chose to tolerate a far higher degree of risk than we should have, which led to the deaths of seven men.

³Tom Wilson and Stephen Quesnelle, *Moments of Impact*, page 5. The International Safety Institute, 2015.

⁴Tom Wilson, page 110.

Risk Tolerance: Lessons from a Hospital Bed

Following the accident, I spent months in the burn ward, which gave me time to think about the accident and formulate ideas about how we deal with risk in our personal and professional lives.

One idea my mind kept returning to had to do with bravery and courage, and the difference between them. Bravery, I came to realize, is putting yourself physically at risk. We celebrate the bravery of sky divers, rock climbers, soldiers, and others.

Courage is different. It's how we respond internally when we recognize something is wrong. We see courage in someone like Martin Luther King or Mother Teresa. Courage means speaking up and taking action to create change, especially in the face of great pressure to do otherwise.

In a workplace environment, we need to recognize and celebrate courage among employees, managers, and contractors – anyone who shows the courage needed to call attention to a risky or unsafe situation or environment. I look back on that day in 2008 and remember the anxiety I felt about the flight and wish I had had the courage to take a stance.

Instead, what happened then happens so often in the workplace. People recognize a hazardous situation – and choose to ignore it. Work accidents happen in spite of the fact that we're already aware of the factors that cause them. In fact, most companies do an outstanding job of hazard recognition, but a majority of injuries in the workforce result from hazards that have already been identified.

We tolerate risk when we should be taking steps to reduce it. The plane accident I was involved in is a case in point. As I mentioned above, the report following the accident noted that “Left unchecked, [risky] practices become accepted norms.” Unless it's dealt with, risk tolerance can become part of the culture of an organization – and once established, it's very hard to purge.

Recognizing the Factors that Lead to Risk Tolerance

Reducing accidents requires that companies recognize not just hazards in the workplace but also the factors that lead workers to incorrectly respond to those hazards. Based on my own research following the crash, I was able to identify several conditions that lead to excessive risk tolerance in a work environment.

Moments of Impact outlines 10 factors; for the purposes of this paper, we will explore just a few:

1. Perception of Control. Our own perception that we have control over our environment can lead us to take far greater risk than is justifiable. For instance, most people feel safer in their own cars than they do in passenger jet despite the fact that driving is more dangerous than flying (my own experience notwithstanding). We feel like we're in control when driving, which gives us a false sense of security. In the

workplace, people commonly fall victim to this thinking and believe themselves to have more control over their environment than they do. Cell tower climbers, for example, are notoriously overconfident – as a result, they often fail to take the proper precautions.

- 2. Experience with An Outcome.** When a task involves a certain amount of risk and people performing the task have a positive outcome, they are more likely to accept the risk and repeat the task. The success creates a sense of confidence and mastery even when it's unjustified, the way a gambler feels when he's hit a hot streak. The result is overconfidence and increased risk tolerance. And it can be dangerous for others as well. An experienced worker may become a model for younger, less seasoned employees who see risky behavior without appreciating all the subtle steps the more experienced person takes to manage that risk.
- 3. Pressure to Perform.** Managers often exert pressure on employees in subtle ways that they're unaware of, or that have unintended consequences. Under these conditions, employees and contractors can cut corners or take other risks to meet a manager's or company's goals, especially to meet a deadline or budget requirements. In my own example, I can say with confidence that each of us on my flight, including the pilot, felt some kind of pressure to continue in spite of the risk. I recall feeling pressure to meet career goals, pressure to get to our destination and relieve the men who had been away from their families, and pressure not to disappoint others on the plane.

These factors can be indicative of a cultural tendency toward excessive risk tolerance. They can be both more pervasive and more difficult to recognize within an organization. However, the fact that they are difficult to identify doesn't mean they are impossible to identify. And once they're recognized, companies can take steps to minimize the factors that contribute to excessive risk tolerance.

Assessing and Mitigating Risk

by Jared Smith

When we talk about risk in EHS, we tend to focus on the clearly identifiable hazards that threaten life and limb. We look for ways to help employees and contractors work more safely and we focus on measurable data like total recordable incident rate (TRIR). This is especially true in the industries we serve at Avetta: oil and gas, facilities management, telecommunications, construction, transportation, pharmaceuticals, and manufacturing. EHS directors focus on data like TRIR because it is quantifiable and it can be addressed by taking clearly defined steps.

Companies have become very good at recognizing and communicating hazards – but it just isn't enough. Most injuries in the workforce result from hazards employees are already aware of. They take risks knowing the danger in part because of cultural factors like “perception of control” and “pressure to perform.”

Let's dive deeper into the nature of risk as a cultural issue, look at how this topic relates to supply chain management, and suggest approaches you can take to reduce this often unquantified risk.

The Real Cost of Risk

There are three primary ways unchecked risk can damage a company:

- 1. Risk to people**
- 2. Risk to operations and finance**
- 3. Risk to brand**

In reality, these are interconnected, but we'll touch on them briefly as separate concerns.

- **Risk to people.** For good and obvious reasons, harm to health and well-being is the number one concern for EHS. The focus, as we mentioned, is on evaluating risk in the work environment, and the problem is that people do not properly mitigate those risks to ALARP (As Low as Reasonably Possible) rates. The tragic incident Tom Wilson was involved in is a horrific example of how people or companies consistently overlook clear risks, which the Transportation Safety Board of Canada thoroughly documented in its report.
- **Risk to operations and finance.** While accidents that harm people get the most media attention, companies are just as susceptible to operational or financial risk. An accident that shuts down a factory may not result in serious injury but could cost the factory owner a million dollars or more in lost revenue for every day the facility is out of commission. And every day the factory is not running undermines relationships with customers, who may cancel contracts and look to other suppliers to meet their needs. Even a brief shutdown can have a long-term effect.

■ **Risk to brand.** This risk is the least understood and the least measurable, but the cost to a company's brand from missteps is very real. A recent example from the news is Wells Fargo, whose high-pressure sales culture led to employees opening fake accounts to meet quotas. After the news broke, California and other states suspended their relationships with the bank. The true cost of the damage to the bank's reputation probably won't be known for years.

So risk can impact a business in very different ways, from the well-being of its employees to its hard-earned reputation. In many situations, like the examples above, risk grows and is tolerated because of cultural factors such as the pressure to perform. Indeed, culture plays a large role in determining how risk tolerant an organization is.

The Role of Leadership in Risk Tolerance

As the Transportation Safety Board of Canada noted in its report on the accident Tom was involved in, risky practices become "accepted norms" if they are left unchecked. This statement gets at the heart of the issue. Behavior becomes ingrained in culture of an organization, and risky behavior can become the norm if leaders are not vigilant about extinguishing it. The responsibility of a company to its shareholders, employees, and customers requires that the company keep risk in check, and that responsibility falls primarily upon management and leadership.

In the case of Wells Fargo, for example, the CEO John Stumpf was ultimately forced to resign after people inside and outside the company held him responsible for a corporate culture in which employees were in effect incentivized to break the law. Similarly, after the 2010 Big Branch Mine disaster that resulted in the death of 29 miners, Massey Energy CEO Don Blankenship was also held responsible – in fact, he was convicted in 2015 of conspiring to willfully violate safety standards.

The lesson here is that risk tolerance can expand from the behavior of individuals and become a cultural norm within an organization, and leaders often play the pivotal role in eradicating it or encouraging it to grow. This view is in line with the research of people like W. Edwards Deming, who concluded that the management system itself – and not the individual worker – is the root cause of nearly all workplace accidents.⁵

This is not a simple issue to address, of course. It's not easy to discover the presence of excessive risk tolerance within an organization. The problem can often be amplified when suppliers and contractors are introduced into the mix.

⁵ See https://en.wikipedia.org/wiki/Herbert_William_Heinrich

Mitigating Risk in the Supply Chain

Leaders in many industries know it's not enough to manage the culture of their own organization, as difficult as that is. In industries such as oil and gas, they are also responsible for the actions of the many suppliers and contractors their organization works with. Each contractor hired by a large organization brings its own set of cultural tendencies, including its level of risk tolerance and risky behavior.

Consider the 2010 Deepwater Horizon incident in the Gulf of Mexico. BP ultimately accepted responsibility for that tragic accident and paid more than \$60 billion in fines. But the incident emphasized a growing risk that's been trending for 100 years and not stopping any time soon: businesses are moving more and more toward a contractor model and outsourcing, not necessarily off-shoring. Aboard Deepwater Horizon were more than just BP employees – contractors and subcontractors worked on the platform as well. In fact, more than 90 percent of oil and gas workers in the field today are contractors.

Other industries are moving in this direction too, and as they do they take on risk that must be managed. A recent OSHA study shows that the average contractor experiences 2.76 incidents per year, with a direct cost of approximately \$48,000 and indirect costs of \$192,000 per incident.

The point is not that contractors are necessarily more risky than a company's own employees; they may in fact be safer. The problem is that the hiring company may simply not know what kind of risk a contractor represents – until it's too late. The only way to find out the level of risk is to properly vet each contractor and subcontractor.

For example, I'm reminded of a real-world incident involving a manufacturer that hastily hired a contractor to install systems that would prevent its process waste from mixing with storm waters. The contractor, which was significantly under-qualified for the project, made some vital mistakes that resulted in water contamination beyond the plant's own property and into the city sewers, where both the local fire department and EPA discovered the hazard. Had the manufacturer taken the proper prequalification measures, the company could have hired a more qualified contractor and avoided this unfortunate event (and the fines and penalties levied against it).

Safety performance is of course critical. A contractor's history says something about its likelihood of causing an accident. But as they say in the investment business, past performance is not a guarantee of future results. The pilot flying the plane Tom was in had never crashed before, so that statistic clearly did not provide an accurate portrait of his risk tolerance. As Tom points out, "experience with an outcome" (the fact that he hadn't crashed before) can lead to overconfidence and possibly to increased risk tolerance, which certainly appears to have been the case with this pilot.

A hiring company should consider the safety record of its contractors, but the company must go beyond that analysis. We recommend hiring managers and EHS directors look closely at management engagement on the subject of safety. Does management have a commitment statement? Are executives committed to reducing or mitigating workplace accidents?

“Management engagement” can be difficult to measure. That’s why we suggest having open conversations with frontline employees. Having HR present for those conversations is a best practice, but employees must feel free to candidly express their views. Auditors can then get a better sense of management engagement by asking them questions such as:

- 1. What is your process when you identify a hazard or a situation that doesn’t feel safe?*
- 2. What types of staff meetings are held? Who attends and leads these meetings typically?*
- 3. When you find yourself up against a tight deadline and or feel pressures around budgets or quotas, how do you respond?*

Questions like these can help a hiring company assess the management style and culture of a contractor as well as its tolerance for risk.

Conclusion: How to Reduce Risk in Your Supply Chain

You may have an exemplary safety record at your own company. Perhaps you followed the footsteps of Paul O’Neill, who radically improved safety at Alcoa in the 1980s and 1990s while generating much higher net income for the company. As O’Neill himself said, “If you want to understand how Alcoa is doing, you need to look at our workplace safety figures.”

This is all well and good when you can manage the safety culture yourself. But for today’s organizations that use contractors to perform up to 90% of their work, the culture of those contractors plays an outsized role. Their cultures must also be accounted for through careful audits and assessments.

This is easier said than done, of course. Conducting detailed interviews with all of your contractors – not to mention all of their subcontractors – to assess their cultural attitudes toward risk is simply not possible for most hiring companies. This is why organizations that rely heavily on contractors often employ a supply chain risk management solution like Avetta.

Avetta connects organizations with qualified suppliers. We have collected, and continue to collect, a wealth of data to provide hiring companies with a true picture of the risk profile of suppliers and contractors. Just as important, we ask a lot of questions. We probe contractors to get an accurate sense of management engagement and culture. We also use secondary resources to fill out our own perspectives.

While supply chain risks can't be eliminated entirely, there are ways you can lessen them. Investigating contractors beforehand is one important step that can hugely reduce business risk and prevent unexpected supply chain disruptions. Proactive, ongoing monitoring can also identify small incidents in near real-time before they become large, catastrophic accidents that cost more than brand reputation and financial risk, but life as well.

At the end of the day, workplace safety is no accident. Everyone – from the frontline employee or contractor to the chairman of the board – is responsible for creating a culture that emphasizes safety as a core value. This philosophy must apply equally to the hiring of qualified contractors whose safety records and company values align with your own.

About Avetta

Avetta connects the world's leading organizations with qualified suppliers, contractors, and vendors. We bring unmatched visibility to your company through cloud-based technology and human insight. As a result, we foster sustainable growth for your business, as well as your supply chain. Our SaaS subscription software is used by 50k+ active customers in over 100 countries.



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