



To SIF or Not to SIF: Using Significance as a Filter

A welcome but relatively recent development in the world of risk and safety is the introduction of “significance” into the consideration of learning from incidents and other opportunities for improvement. This is not new to the vPSI System™, as it has had a significance filter built in since it was conceived almost 25 years ago, the purpose of which is to ensure that the vPSI organizational learning KPIs only measure learning related to issues that are important from a risk perspective.

Considerable literature now exists to guide those interested in following the significance route, including technical papers authored by vPSI personnel from the early 2000s. Unfortunately, there are many different terms and definitions competing in the marketplace of ideas, including:

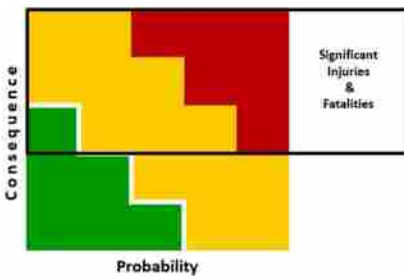
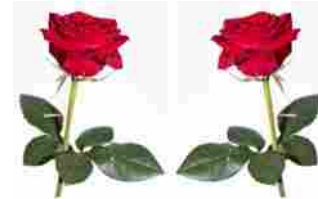
- SIF: Significant Injury/Fatality
- SIP: Significant Injury Potential
- PSIF: Potential Serious Injury/Fatality
- HiPo: High Potential
- FPI: Fatality/Permanent Injury
- PSI: Potentially Serious Incident
- SLOE: Significant Learning Opportunity Event
- STKY: Stuff That Kills You
- LAIF: Life Altering Injuries/Fatalities

As the old saying has it, "A rose by any other name would smell as sweet," meaning that the terminology used by an organization is less important than the way in which it is defined and used. A variety of filters are available for determining which exposures will be deemed significant.

"A rose by any other name would smell as sweet"
Paraphrased from Romeo & Juliet
by William Shakespeare

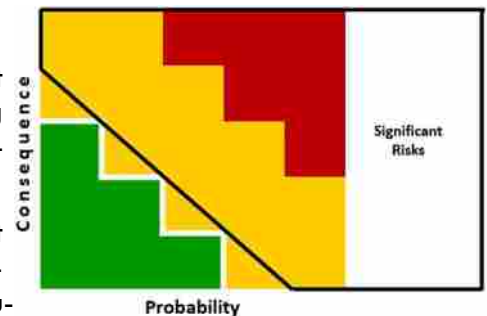
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One common definition of significance, shown on the left, uses only consequence as the determinant, potentially capturing low-probability exposures normally considered acceptable risks in pre-task planning. This can lead to riskwashing, as it may encourage vigorous investigation of events for which such high consequences are extremely unlikely. This also ignores more frequent low-consequence issues which individually lead to minor consequences but which in aggregate may be worthy of attention.

As shown on the right, the vPSI System™ applies a risk-based filter to determine significance, comparing the event or exposure to the organization's risk tolerance threshold, thus capturing both low-probability, high-consequence and high-probability, low-consequence exposures and taking into account risk appetite.



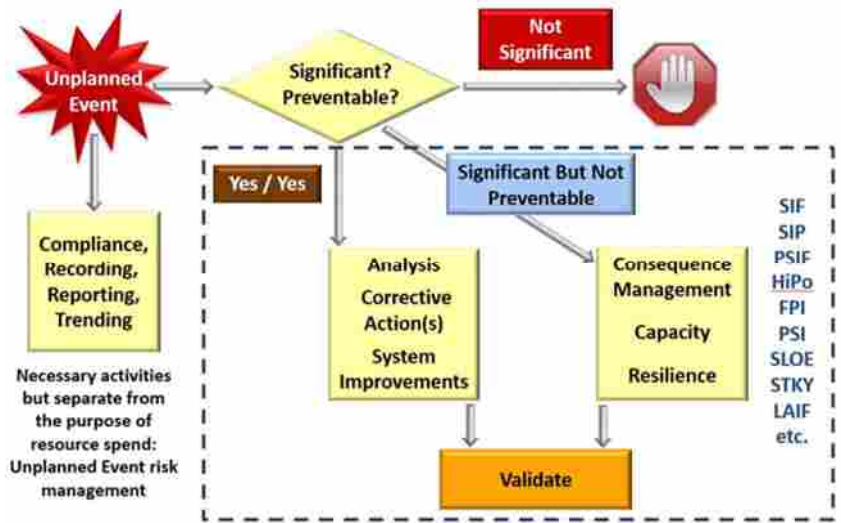
A common weakness in the implementation of significance thinking is to limit assessment to injury exposures. All risks should be considered when assessing significance, such as business interruption, environmental harm, reputation damage, etc.

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After an incident has occurred, the decision flow to the right should be followed.

After identifying the Unplanned Event, a risk assessment should be carried out to determine the risk inherent in the activity that went awry, should it be carried out again in the future, with no actions having been taken because of the incident just experienced. The result of this thought experiment can be compared to the organization's risk matrix to determine if the inherent risk is inside or outside of the risk tolerance or pain threshold, meaning significant or not significant, which will then inform the logical next action.



Demonstrating Management Commitment And Understanding The State Of Your Safety Culture Through Surveys

Historical measurements of the state of a company's safety performance have revolved around lagging indicators. We now know that those measures are imperfect and rarely an indicator of future performance.

Many companies have integrated leading indicators into their metrics to make sure that actions and inputs to improve performance are being tracked. One of

those indicators for many companies is how their employees feel about the company's commitment to safety. This gives a company insight into their safety culture and how well their messages around safety are landing. This also shows the commitment of leadership to addressing gaps in how safety is being led and managed.

While there are many variants of safety culture surveys available, one of the most robust is the National Safety Council's Safety Barome-

ter survey. The NSC has been conducting the Safety Barometer survey for over 35 years and therefore has millions of responses for companies to benchmark against.

NSC SAFETY BAROMETER

This employee perception survey is a listening and learning tool that allows a company to gather essential insights to advance its safety management system and culture. Taking this survey can allow a company to compare perceptions of safety culture and management to millions of respondents in their proprietary database to understand the organization's true strengths and areas of opportunity.

vPSI and NSC are committed to helping companies improve their

culture of safety and performance. This survey takes only 10 - 15 minutes of your employees' time and can help your organization build strategies to improve safety performance and culture at a strategic and tactical level.

To learn more about the survey, look at the NSC website. vPSI Group and the NSC can help your organization improve culture and performance using the survey results.

Triskaidekaphobia

Although around 10% of the US population is uneasy with the number 13, vPSI has decided to continue our H-E-A-R Say volume numbering series without skipping the much-maligned number, with apologies to anyone bothered.



We've Been Published - Again!

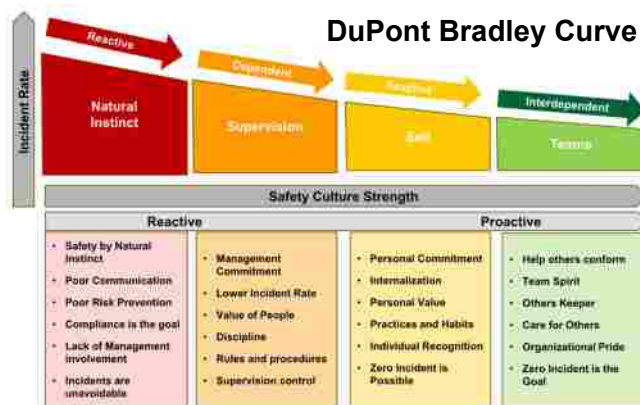
Tom Knode, vPSI Principal Consultant, recently had an article published in the industry magazine, American Oil and Gas Reporter. His article, "Advancing Safety Will Take Modern Metrics and an Inquisitive Culture," was included in their December issue. Although the article is too long for full inclusion in this newsletter, here's a summary for our readers, with the full article available online (Hint: all our electronic newsletters have hidden links to relevant information. Happy hunting!)

The article starts with a look at where the industry is now. Though current Oil and Gas safety statistics are trending downward in the nonfatal injury rate category, with TRIR reported at 1.8 in 2022 per the American Petroleum Institute's Workplace Safety Report. There is always room for improvement, especially in the significant incident and fatality (SIF) category. The article goes on to explain the moral and business drivers for focusing on safety. "Ultimately, studies show that companies with better safety performance outperform their peers across multiple metrics, including profitability."

Driving safety is one of the biggest challenges within the industry, "the leading cause of occupational fatalities among oil and gas extraction workers" per NIOSH. Some of the suggestions for reducing risk include driver training, Journey Management, improved

vehicle technologies and In-Vehicle Monitoring Systems (IVMS) and cameras. vPSI staff have experience with improving driving safety programs and we would be happy to help!

Next, the ideas of leadership and culture are addressed, vis-à-vis the Dupont Bradley Curve as shown here which "offers concise but meaningful vocabulary



for describing the state of a company's safety culture." Leaders who understand where their organization is on this spectrum are better prepared to identify areas for improvement. Safety Culture surveys such as the Safety Barometer offered by the NSC can help identify the current state of safety culture. (Hint: vPSI's Safety Leadership Workshops equip safety leaders with the tools

needed to advance their organization's safety culture, and we can also help develop effective strategies with this goal in mind).

Finally, other issues including incident response, technical controls, incorporating Human and Organizational Performance (HOP) principles, industry association involvement, and safety metrics that measure inputs and not just outcomes are covered. "Achieving lasting change means developing plans based on an honest understanding of the factors that drive performance and the risks that need to be mitigated."

Yet Another Reason to Drop TRIR as a Safety Measure (Do You Really Need One?)

vPSI has been encouraging organizations to quit using TRIR and related lagging measures as safety metrics for more than two decades (see our multiple articles about this in our newsletters and on our LinkedIn page), and especially to stop using TRIR as part of safety incentives. In the last ten years or so, we've been joined in this effort by such organizations as OSHA and the CSRA.

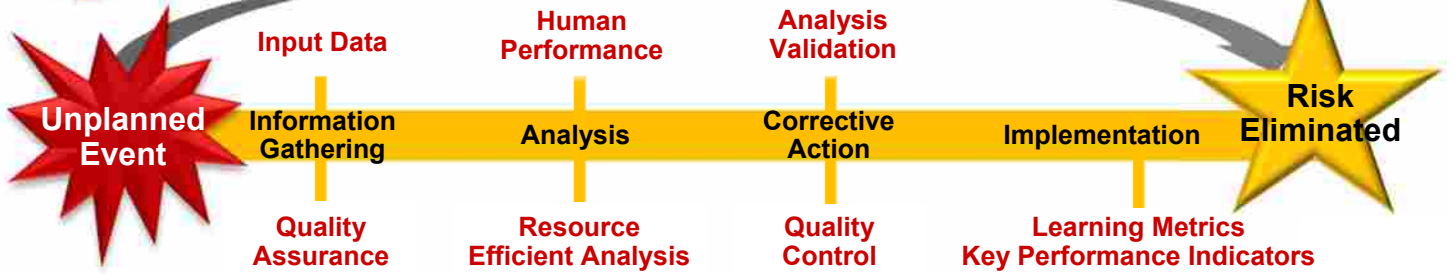
But changing an entire industry does not happen overnight, despite the many organizations urging for this. So, in case you, dear reader, need more incentive to change your incentives, consider this: a NIOSH study on acute non-fatal occupational inhalation injuries found an estimated 2.2 occupational inhalation injuries per 10,000 full-time equivalents treated in emergency departments, a rate nearly four times that found in Bureau of Labor Statistics data. A similar discrepancy is likely to be found across all injury types.

If inaccurate data isn't enough to convince organizations to stop the nonsense, we're at a loss as to what would.



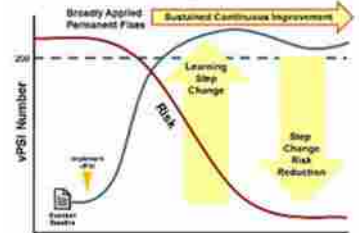
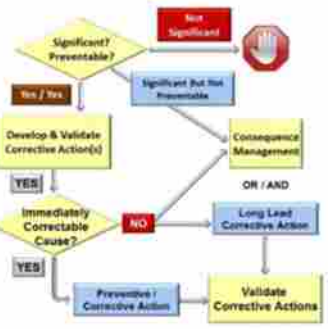
Sustainable Continuous Improvement

The Investigation

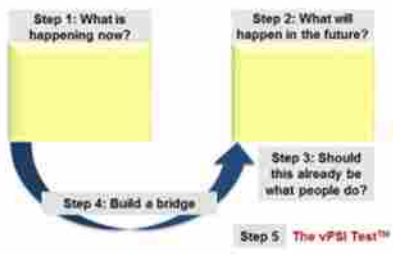
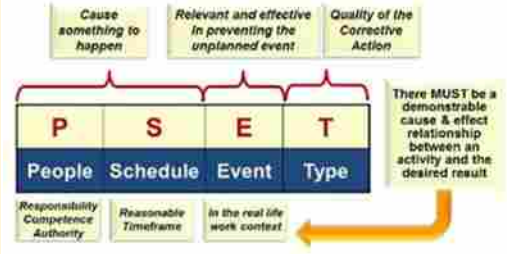


Data Quality Ladder

- FACT** - Verifiable, objective, measurable
- Deduction** - Logical inference
- Assumption** - Something taken for granted or supposition
- Opinion** - May be based on gut feelings, experience
- Belief** - A strongly held conviction
- Hearsay** - Second- or third-hand information
- Guess** - May be "WTF" or "Icked!" (WFOs or ETRACs)
- Fantasy** - No basis in reality



The vPSI Test™: Evaluation of activities presented as Corrective Actions



The vPSI System™ Integrated Incident Investigation & Learning Process

Now also available as the vPST® Digital Toolkit

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