H-E-A-R SAY

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Volume 7, Issue 2

Recovering Value Lost From Unresolved Near Misses

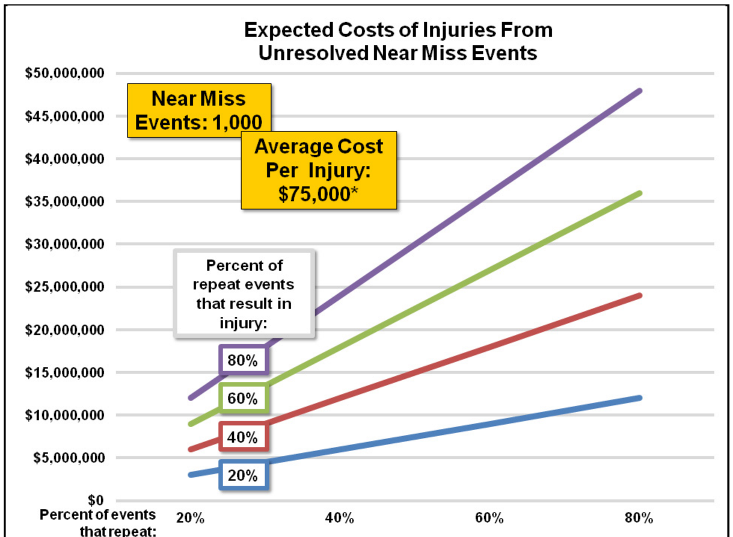
Inside this issue:

It is generally accepted within the safety discipline that more Near Misses occur in reality than are reported into the system, and that even when identified, many are left unresolved. These missed opportunities for improvement and future loss avoidance offer bottom line benefit if they can be taken advantage of, but valuing them to determine return on investment can be difficult due to the multiple layers of probability involved. A simple technique developed by vPSI Group provides a solid foundation from which a business case can be built demonstrating the potential for value recovery through robust near miss reporting and resolution.

The following illustrative example is based on an organization experiencing 1,000 <u>actual</u> (versus reported) Near Miss Events per year. For simplicity, the example addresses only one potential adverse outcome: injury to people. Clearly the same approach can be applied to all other potential negative consequences such as business interruption, environmental harm, asset damage, etc.

Acknowledging that we inhabit a probability-based universe, it must be accepted that there is a portion of the population of Near Miss Events that are unlikely to ever repeat, whether or not any action is taken against them by the organization. Clearly, this will depend somewhat on the extent to which workplace conditions and activities vary, therefore it is reasonable to consider that this might range from 20% to 80% of the total per year.

Once an event has occurred, a second layer of probability kicks in related to the degree of consequence realized. Some fraction of the repeat events will again be near misses, while others will result in injury to some degree. In reality, this is a complex spectrum of possibilities, but for ease of visualization it is sufficient to consider a set of discrete values from 20% to 80% and an average injury cost (see box). An extremely insightful chart can be plotted from this data, as shown above.



*Note: This includes indirect costs and is the average cost for a low level injury. In contrast, a reasonable all inclusive average cost for a disabling injury is $1.2 million. This case study only considered minor injuries.

The most optimistic case charted represents 20% of total Near Miss Events repeating per year going forward, and of these, only 20% resulting in injury. The expected value of loss in this optimistic scenario is $3 million per year.

Without a robust Near Miss reporting and resolution culture the typical organization will not affect the probability of such events repeating and thus reoccurrence can be expected. This is invariably confirmed by baseline vPSI Metrics. The expected value of loss in the most pessimistic scenario charted is $48 million per year.

To come up with a business value for improving near miss reporting and resolution based only on the elimination of repeat events, first decide what percentage of events will repeat and draw a vertical line at the appropriate place on the x-axis. The value recovery associated with various percentage reductions in repeat events can be read off from the y-axis.

A useful feature of this chart is that it does not require agreement on

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Risk Bandits

Norman Ritchie, vPSI Group Director, was recently honored to be asked to review the new book "Risk Bandits" pre-publication. The authors, Rob Hogarth and Tony Pooley, are both gurus in the field of risk management and have reached a point in their careers where they can call things as they see them without fear of the consequences. For example, they put forward a well supported argument that the risk matrix in its commonly used form is hokum, a fairly controversial point of view to say the least. The illustration to the right, reproduced from "Risk Bandits" with the permission of the authors (and Patrick Hudson), sums up their opinion of this widely misused tool. Norman commented "It's refreshing to know that vPSI are not the only risk management radicals around!" Watch future issues of *H-E-A-R Say* for publication information.

"The matrix is risk assessment's version of pinning the tail on the donkey."
- Professor Patrick Hudson,
Delft University of Technology

Executive Coaching: Leading Your New Organization

Many companies in the upstream oil and gas industry are under new management, either due to natural turnover at the top or through the predatory acquisition of those weakened by the sudden decline in the price of oil. As the dust settles, everyone needs to find ways to optimize their new working arrangements. We have prepared this Dilbert-inspired guide for the new bosses, the creme de la creme, the strategic senior leaders who are quite naturally appointed / anointed to run a company or business unit:

Step 1: Criticize your predecessors. If they were any good, you would not have so many problems to deal with! Proclaim vociferously that you never would have agreed to do X and your last company did this differently. Ignore the fact that X was a standard industry practice or required by law at the time your predecessors agreed to do it, or was the result of a negotiated or engineered solution to a complex situation. Exclude anyone who brings up such ancient history from future meetings because he or she is too negative and obviously not a team player.

Step 2: Talk a lot of smack about how things are going to be now that you're the new sheriff in town and mock / denigrate anyone who suggests that maybe there are some real world considerations that impinge on your vision of how things are going to be. That will silence those who disagree with you!

Step 3: Implement a new "performance management" system that requires employees to "compete" with their coworkers and "win". Some truly great companies have applied the "rank and yank" approach; Enron immediately springs to mind. Because so many of the employees hired by your predecessors are incompetent, bring in people from your last company or the one before that. People you know from your last company are always better and smarter.

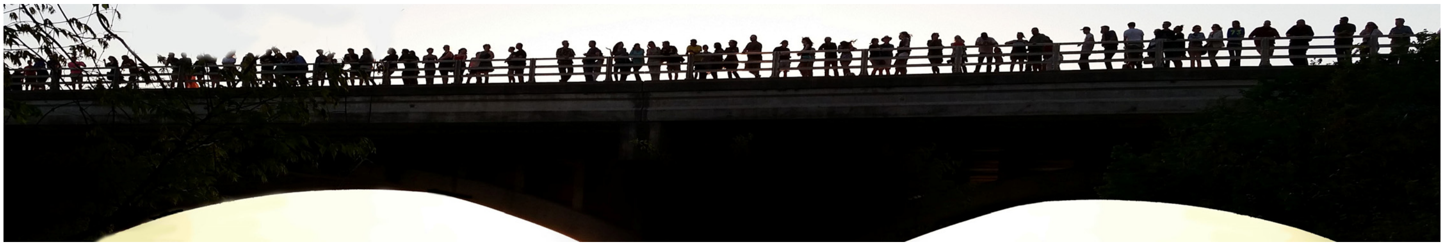
Step 4: When things begin to go badly, blame someone or something -- maybe markets or commodity prices, maybe your employees and most likely some combination of the above. Also blame your predecessors again. View bad news as an opportunity to have a reduction in force. That will give you cover to fire your "poor performers" (see Step 3). Look for easy targets, for example: there are hardly any accidents here, so why do we need all these Safety people?

Step 5: Do not accept meetings with people who might disagree with you or say unpopular things (e.g., "The baby is ugly!" or "There is no field in SAP / SMS / PMP with that information.") Listen only to your selected inner circle composed of agreeable people who can "manage up" and who understand your sport and hunting metaphors. Obviously, this group will be disproportionately made up of people from your last company. Make others work through them to minimize the number of inconvenient facts you will encounter.

Step 6: To the extent that employees you dislike accomplish something in spite of you, find fault and bash them for "giving away" so much. Revisit the decision. Humiliate them in front of peers so that the smart ones cease making decisions ...*Continued on Page 4*

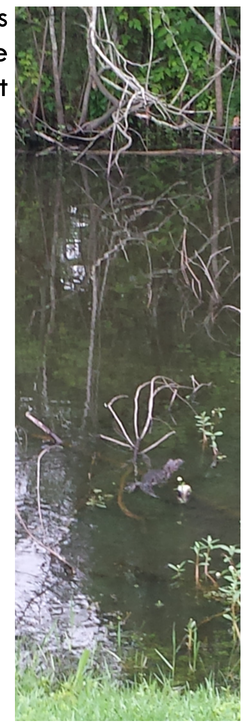
Combining Business with Pleasure

(More vPSI travel photos can be found on our Facebook page.)



vPSI consultants travel extensively in the course of their work and, wherever possible, try to fit in some pleasure alongside their serious business.

Two of our consultants recently attended the National Safety Council's Texas Safety Conference and Expo in Austin, Texas. While there, they joined the crowd at the Congress Avenue Bridge to watch the evening bat flypast (above). This spectacular sight is only available during the summer months as the Mexican free-tailed bat is migratory, heading south to winter in warmer climes. As dusk falls, the 1.5 million residents of the world's largest urban bat colony head out for their evening feast of up to 20,000 pounds of insects.



Our colleagues were able to satisfy their own dietary needs at Le Café Crepe (left) where they enjoyed an authentic Parisian-style trottoir breakfast, French server included!

Marathon Petroleum recently hosted vPSI's two day Incident Investigation workshop at two of their refineries. Returning from the Catlettsburg refinery, the "Yelp" smart phone app led the trainers to the historic Tousey House Tavern in Burlington, Kentucky, where Southern food, charm, and hospitality hold sway. Five stars!

The Garyville refinery is close enough to New Orleans for our consultants to experience the evocative atmosphere of the French Quarter, including enjoying beignets and coffee at the world famous Cafe Du Monde, buying souvenirs, and visiting local voodoo shops. However, the highlight of the trip was seeing a baby alligator in the bayou outside the hotel (right). Risk assessment took into account the alligator's strong maternal instincts and the possibility of a lurking parent, and reached the logical conclusion: stay well away!

Recovering Value Lost From Unresolved Near Misses

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what proportion of repeat events will lead to injury, as the improvement delta dictates the potential value recovery. In addition, ranges of value can be described to take account of varying opinions regarding the likelihood that repeat events will occur.

The chart can be calibrated to the size of an organization, the types of operations being undertaken and their relative exposures. There is also scope for refining this kind of analysis, for example by including a wider range of negative outcome types and magnitudes. Given the number of variables, however, the current level of analysis is as granular as is useful in most circumstances.

Minimal investment is required to improve the reporting and effective resolution of Near Misses through implementation of programs like the vPSI System™. Given the costs of injuries and other losses, the return on investment from eliminating repeat events is significant and swift.

Executive Coaching: Leading Your New Organization

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entirely. If a result cannot be revisited, give the credit for work done by others to the members of your inner circle because, after all, you only saw members of your inner circle if you followed Step 5, and no one in your inner circle is stupid enough to acknowledge the contributions of those losers who have worked here for years before you showed up to save the organization.

Step 7: Compliance people (Safety, Legal, etc) are invariably over-conservative in their thinking and are to be avoided. They just don't understand that results are the only things that count. After all, you comply with the important laws -- just not the annoying ones. Agencies like OSHA, the IRS and the DOJ are chronically understaffed and highly unlikely to pay much attention to what you're doing. Compliance is boring, anyway; how can nothing happening be a measure of success? If a risk you have taken turns out badly, just follow Step 4 above.

Step 8: Refer all decisions of any consequence to a committee, the more elevated the better. Ignore the bottleneck this creates and blame compliance people for slowing projects down. Require that all issues be presented in your specific PowerPoint template. Make people wait outside meetings for at least an hour before being summoned. Spend at least half of the meeting time on Steps 1 and 2 above. So-called "subject matter experts" over-complicate decisions by bringing up specific problems and concrete implementation issues. Only invite them to meetings if you think you must or if your minions want some cover. If they attend, do not allow them to pull the meeting off track. If they persist, point out to them (preferably condescendingly) that your committee is a strategic body, and they can figure out tactical issues and implementation details. (This also sets them up in case things don't go well.) Point out that the meeting is already 90 minutes behind schedule, which it will be if you spent appropriate amounts of time on Steps 1 and 2.

Step 9: Take full responsibility for successes. See Step 4 for addressing failures.

Brief consideration was given to preparing a guide for those who find themselves "under new management", until it was realized that they really don't matter in the grand scheme of things. They are widgets after all, and if they don't like the new regime, they can easily be replaced (See Step 3).

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