H-E-A-R SAY

We encourage you to subscribe to H-E-A-R Say at: www.vpsigroup.com

vPSI Group, LLC

www.vpsigroup.com

Volume 4, Issue 1

Winter 2012

The Quest for "Why?"

After an accident, everyone wants to know why it happened, particularly when the consequences were severe. This is human nature at play, but there are also compelling organizational and business reasons for finding out the causes of things going wrong. There is truth in the maxim that if you don't know your history, you are doomed to repeat it. Unfortunately, pitfalls and obstacles await the unwary on their quest for "Why?"

"*Felix qui potuit rerum cognoscere causas,*" (Happy is he who is able to learn the causes of things). So wrote Virgil, the Roman poet-philosopher, 2000 years ago. In writing this, he echoed the philosophical musings of numerous other ancient thinkers such as Aristotle, Lucretius, Cicero and Plato, who went so far as to argue that our greatest satisfaction as human beings comes from active engagement with causes and explanations. Is it any wonder then, that risk management professionals are so obsessed with so-called root cause analysis? We are only human, after all, and as a result tend to expend more time and energy on causal analysis than either evidence and data gathering or developing and implementing corrective actions.

This is such a pervasive tendency that an entire industry has been created to provide analytical software and training, each methodology having its adherents who cling to it with an almost religious fervor. In general, these are excellent, powerful tools when used in appropriate circumstances, where the complexity of the event warrants it. In contrast however, many management systems require them to be deployed on the basis of consequence severity, often an inappropriate use of resources. On the plus side, the use of software to guide the analysis process provides discipline and rigor in handling another human frailty, the predisposition to conflate correlation and causality.

An understanding of cause and effect relationships is usually necessary to determine the relevance and therefore validity of activities presented as corrective actions. This requires good quality data and evidence. The truth of the matter, and one that is unpalatable to us and our organizations, is that it may be impossible to determine what caused a particular event or series of events. This is especially true when it comes to human behavior. Many times the person involved in the incident is too afraid of the repercussions of their actions to have an honest dialogue about what they did and why they did it. Compounding this problem is that many organizations lack personnel trained in incident scene investigation, other than what they have gleaned from watching "CSI" on television.

Inside this issue:

It is not always the case that there is only one reason why something happened, one "root cause." This mistake is often exacerbated by the analysis tools previously mentioned, several of which impose their own limits and non-aligned definitions on the process. In reality, there is no such thing as a root cause; every root cause identified is actually the effect of an earlier cause, on and on, *ad infinitum*. The real skill in cause and effect analysis is in knowing where to stop, generally either at the point where you no longer have control or lack of data makes further investigation pointless.

The final problem with our desire to explain why something happened is an all too human tendency to stop once "Why?" has been answered. In vPSI training workshops, attendees are asked, "What is the purpose of an accident investigation?" With disturbing frequency, the response is something along the lines of, "To find out why it happened." While this is a step along the way, it indisputably is not the final goal. The ultimate objective is to prevent

. . . Continued on Page 4

How to Improve Your vPSI Metrics™

January is bonus time, and our consultants often find themselves fielding questions from anxious employees at companies where vPSI Metrics™ are built into variable compensation programs. Originally written in response to a challenge from a client seeking general guidance on upgrading their vPSI Metrics™, this article is dedicated to those who have left it too late for 2011. By implementing the advice that follows during 2012, they can be certain that next year's elevated performance objectives can be achieved.

There are three components to the vPSI Number™, and therefore three ways to increase it: raise the Awareness Index, the Solutions / Planning Index, or the Implementation Index.

vPSI Metrics	Original	Improved
No Loss Events	*15*	*28*
Loss Events	*28*	*28*
Awareness	0.70	1.00
Solutions Planning	1.93	1.93
Implementation	84	84
vPSI Number	113	191

The Awareness Index can be thought of as a ratio of loss to no loss events. Many organizations do not do a good job of tracking their no loss incidents, or solving those that they do track. The Awareness Index rewards companies for tracking no loss reports; after all, these reports are more valuable to the organization than loss reports because they provide new improvement opportunities without the organization having to suffer any damage or injuries.

To the left is an example of the effect of improving the Awareness Index on the overall vPSI Number™.

The Solutions Planning Index is a weighted average of corrective action types at the investigation level. A good approach to raising the Solutions Index is to strive for no Type 0 investigations, but if there are any, try to raise them to a Type 1 or Type 2.

Organizations with a mature vPSI System™ implementation are generally already beyond this stage and close very few investigations with a final Type 0 rating, a huge achievement in itself. In this situation, raising some Type 1 investigations to Type 2, or Type 2 to Type 3, can also impact the overall vPSI Number™.

To the right are some suggestions for upgrading activities presented as corrective actions.

Corrective Action	Original Type	Suggested Change	Improved Type
Send out a safety alert about the incident, highlighting the dangers discovered.	**0**	**Conduct a training class for all current employees that provides the knowledge necessary to avoid the new dangers discovered.**	**2**
Repair the damaged equipment with new replacement components.	**1**	**Design and install a mechanical modification to all similar equipment on the plant that eliminates the failure mode experienced.**	**2**
Modify the existing planning system to include a pre-job field safety review.	**1**	**Modify the existing planning system to include a pre-job field safety review that includes a checklist of specific assignments.**	**3**

Continued on Page 3 . . .

How to Improve Your vPSI Metrics™

. . . Continued from Page 2

The table at right illustrates the effect of upping the best corrective action on each report by one vPSI Type. This does affect the vPSI Number™, but as the example shows, the impact may be negative unless the Implementation Index is improved at the same time. Keep in mind that the Awareness Index ties back into the Solutions Planning Index. Increasing near miss reporting is a good thing to do, but if solutions to the problems revealed are not devised and implemented, then the investigation will be rated a Type 0 and, worst of all, the problems revealed are still potential exposure areas for the organization.

vPSI Metrics	Original	Improved
Awareness	0.70	1.00
Reports Rated 0	*5*	*0*
Reports Rated 1	*10*	*5*
Reports Rated 2	*11*	*10*
Reports Rated 3	*17*	*28*
Solutions Planning	1.93	2.53
Implementation	84	70
vPSI Number	113	177

The final opportunity for elevating the vPSI Number™ is via **the Implementation Index**, probably the most important facet of the vPSI Number™ since it essentially reflects the percentage of Type 3 corrective actions that are confirmed implemented. A low Implementation Index indicates that the investigation process has developed one or more high quality, long term, broadly applicable, management system or business process based corrective actions but they are not actually in place yet. In some business environments these Type 3 corrective actions cannot be implemented for operational reasons, such as the requirement for a turnaround or plant shutdown, which may not be scheduled for months or years. That reality is going to be reflected in the vPSI Number™. Until you have implemented something, it has not affected the future probability of the known problem resurfacing and in a very real sense, the business has accepted that risk.

vPSI Metrics	Original	Improved
Awareness	0.70	1.00
Solutions Planning	1.93	2.53
Type 3 Plans	*17*	*28*
Type 3 Plans Implemented	*15*	*28*
Implementation	84	100
vPSI Number	113	253

The table to the left illustrates the impact improvement of the Implementation Index has on the vPSI Number™.

In many organizations, those in the HES function do not have direct authority or control over the implementation of the corrective actions that are developed. One of the benefits of the vPSI Metrics is that they provide insight into how the organization as a whole handles its problems, not just the good people of HES, with the result that the safety impact of business based decisions becomes much clearer.

A final note to those tempted to cheat: Go for it! BASF, one of the first users of the vPSI System™, applied their analytical skills to reveal that cheating is only possible by achieving the ultimate objective of the vPSI System™, which is to find real exposures and eliminate them.

vPSI System™ Users' Forum

March 2012 will see the first of what is expected to become a regular event: the vPSI System™ Users' Forum. This meeting, to be held in Houston, will bring together the community of vPSI user companies and provide them with an opportunity to benchmark performance, share best practices and provide input to future development. Readers who have topics they would like brought up at the forum should contact us to find out who will be representing their organization.

The Quest for "Why?" . . . Continued from Page 1

whatever went wrong from happening again. vPSI consultants review hundreds of investigations every year, and frequently encounter reports incorporating beautifully presented cause and effect analysis with worthless actions or recommendations which will have no impact on the future probability of reoccurrence.

The ancient philosophers were generally in agreement that human happiness depends on the fulfillment of a basic need for explanation, but the safety professional must be wary of this trap. In slightly more modern times, Friedrich Nietzsche's "Twilight of the Idols" (also known as "How to Philosophize with a Hammer") observed a common error in the quest for "Why?": acceptance that "any explanation is better than none." To the organization that sincerely wants to prevent accidents and incidents, this is obviously not good enough, but the biggest challenge remains the next step, developing and implementing effective corrective action in the real world.

Combining Business with Pleasure

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

Recently, two of our consultants traveled to Salvador in the Brazilian state of Bahia. Salvador, and really all of Brazil, is a study in contrasts. Uplifting beauty can be found side by side with heartbreaking squalor. Rich and ornate buildings attest to the wealth to be found there, while beggars in the street speak to the 26% of the population that is below the poverty line.

After training Champion Technologies personnel in the Fundamentals of vPSI Problem Solving, our consultants spent a day touring Salvador, the 3rd largest city in Brazil. The highlight was an authentic Bahian meal at O Coliseu in the Pelourinho district of Salvador, followed by flamboyant and exuberant Folklorico dancing which reflects the rich history of the area. The evening was capped off with an athletic display of *capoeria* (pronounced kap-oo-**air**-uh), an energetic dance style that combines elements of martial arts and sports.

Paradoxically, finding good places to eat in a big city is often more difficult than in a small town where there is less choice. Here are some quick recommendations from the foodies in our organization: if you find yourself in Copenhagen, try Ristorante RetroGusto. For those in Detroit, we recommend Giovanni's Ristorante. Finally, when in Toronto you won't regret eating at Fred's Not Here.

Upcoming Training Classes

Fundamentals of vPSI Problem Solving and Accident Prevention is vPSI Group's core class. It provides attendees with the tools necessary to do a critical analysis of their corrective actions and problem solving efforts.

We currently have two workshops scheduled in Houston: February 14th and May 15th, 2012. For more information, visit our Eventbrite page or contact us.

vPSI GROUP, LLC

Become a fan / follower on facebook twitter

10497 Town & Country Way
Suite 225
Houston, TX 77024 USA
Phone: +1 713 460 8888
Fax: +1 713 460 8988
Email: info@vpsigroup.com
Website: www.vpsigroup.com