Supplement to “PS Asks,” Professional Safety, August 2012

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PS: What are the benefits of holistically managing SH&E operational, financial and reporting risks across facilities?
Jeremiah: If a company can create a global platform for operational, financial and reporting risk management, it creates the basis for repeatable and manageable performance. In too many companies, performance from one facility to another depends on local talent, which creates highly diverse performance and a lack of both improvement and confidence via intrasite learning. With a unified information and work management system, the tools are in place to tackle risk management head-on in a unified and repeatable manner.

PS: How can management be more proactive when identifying and assessing risks?
Jeremiah: Management leadership and participation are key but that is nothing new to safety professionals. What is new is the ability for management to utilize advances in technology to tackle long-standing challenges in risk identification and assessment.

One example of such a challenge is capturing the full spectrum of unwanted events in the operational environment ranging from reportable incidents to near misses and safety observations. This spectrum is often called the safety pyramid due to the large ratio of near misses to incidents. Understanding the base of the safety pyramid is the biggest challenge: In the operational environment the tendency is to only report incidents. This means that an in-depth understanding of latent risk in the form of near misses and unsafe acts does not exist.

Here, technology bears some promise in the form of the increasing ubiquity of mobile devices, either company or employee owned. The rise of mobility cannot be underestimated as these devices dramatically lower the burden for employees, contractors and the general public to report near misses and unsafe acts, this increase in data can help SH&E professionals to better evaluate their safety pyramid from the bottom up. Using mobile phone apps, an SH&E professional can take a snapshot of unsafe conditions. This becomes a pervasive, continuous risk assessment.

Employers derive an enormous amount of information from the device itself. It shows GPS coordinates, who entered the information and so on. This decreases the amount of information a person must enter while increasing the data available to the SH&E professional to understand the environment in which the event took place, leading to better follow up and management of the risks identified.

The bottom line is that humans still make mistakes, and that is something we can’t change. What we can change is how digitally savvy employees are, and how they use their abilities to bring more tools to play and tools for safety professionals to leverage. You can give employees more tools to bring to bear on the immense challenge of changing the safety culture.

PS: How might an SH&E system cut operating costs?
Jeremiah: With SH&E operational risk management, there are fewer unsafe incidents both large and small. This means less downtime and lower medical costs associated with injured employees. In the long-term, most customers will be self-insured. You can drive down the penalties and fees associated with loss of life or injuries, as well as noncompliance with safety regulations. On the product side, you will decrease the cost of inventory that is unsellable because it was not compliant with applicable laws. This decreases costs associated with product compliance and registration and drives down the costs of responding to an RFP. Finally, this system lowers the cost associated with end-of-life compliance because it allows you to comply with recycling regulations.

PS: How does SAP’s EHS management application support sustainability initiatives?
Jeremiah: SAP started delivering business software about 40 years ago. It began in core operational areas such as financials, human resources, supply chain and sourcing. At first, there was a strong focus on product and the elements inherent in the production environment. Even with our earliest customers, there has been a notion of safety with regard to how products are produced and how that affects human safety and health, the environment, and asset safety, as well as ensuring compliance for products we are making.

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A common misconception is that we are new to the game of looking at how to drive safety with regard to the environment. We have an EHS management portfolio that dates back nearly 20 years. We have more than 1,600 customers, which gives us a deep insight into the concerns of safety professionals. When we spoke to our key customers about what they needed to support sustainability initiatives, they asked us to help them with safety, as it is a CEO-level priority for them, so we put that at the core of our focus.

We renewed our assumptions around what people really needed and used two major business cases to achieve that. The first is operational risk management which refers to how we calculate risk before it occurs. The second is embedding product compliance from the moment of design to the end of a product’s life cycle. This refers to how we manage the safety and health effects of a product from sourcing materials to recycling components at the end of the product’s life. When we asked our customers what they wanted, those were the two hottest areas.

We had to figure out how to practically identify risks in our environment and manage them without hurting production continuity. Customers want to maintain the broadest markets while understanding and controlling chemicals that can harmfully impact citizens, workers and the environment. Our software sits at the heart of how companies respond to these key challenges, how to create safer work environments and how to make safer products.

**PS:** How can the application enhance corporate image and brand management? What customers are best suited for it?

**Jeremiah:** For a company that relies on high-risk processes or whose brand plays a significant part in how customers choose those products, an SH&E management system is enormously important. The ability to clearly communicate progress can enhance companies’ relationships with investors, consumers and business partners.

In operational risk management, the ability to improve safety performance leads to desirable outcomes. If you can demonstrate that you are making investments constructively by creating a safer workplace, then you are more attractive to employees. This can be an enormous enhancement. From an investor’s point of view, showing that investments made in your company are safe—that you’re not wasting investors’ dollars and your production reliability is high—looks better to investors. Most companies think about how fast they can get something with little to no time spent considering the unintended consequences. In terms of embedded product compliance, the SH&E tools used to ensure compliance can be used to go beyond compliance into designing sustainable products.

One example of this would be a product designer using green screens to identify nontoxic, low-energy or recyclable components in a design. Information on these components comes from the core compliance application so designing more eco-friendly products is a natural extension of designing compliant products. Also, data indicate that a company can enhance its brand by innovating in sustainable products.

Any customer in a situation where the products it produces are risky or have a regulatory applicability will find value in an EHS management system. Even small businesses, such as a specialty chemicals business, are often active in 20 different countries. The market is essentially the world—and these firms need software to protect participation in that market.

**PS:** What are some complexities associated with compliance on a global scale?

**Jeremiah:** Global compliance can mean two things—compliance with regulations and policies across a company’s global footprint and compliance with product regulations across the global market with which a company does business. SAP EHS Management helps with both challenges.

First, what we’re seeing globally is that companies are making a shift from local safety and health to global and operational risk management across the entire operational footprint. The risk approach makes an enormous amount of sense because risks tend to be repeated. If you can identify those “bad actors” early and replicate learning with how to deal with them, then you can share those best practices across all levels of the entire company. The ability to drive a higher level of global performance is significantly better.

SAP helps customers achieve this shift by creating a single system of policy and record for the entire company to use. All the data reside in the same system while providing a tailored and localized view to plant- and department-level teams. This makes application of, say, a standard risk assessment methodology or standard incident recording methodology straightforward, and it ensures that the information captured in each case adds to both local and global insight into risk via sophisticated analytics. Additionally, workflow and standard process can be enforced.
This means that local learning can be cascaded across the entire company, and access to global information is available for everyone leading to the basis for a sustainable continuous improvement process.

Second, by extending core Bill of Material data with SH&E information, and by providing a means to model regulatory compliance rules along with regulatory document generation, SAP has created a compliance-oriented product and architecture in which any legal requirement can be represented and automated, allowing designers, product managers, compliance experts and other employees to focus on creating great products without fear of loss of marketability. This ensures access to markets and increases competitiveness.

**PS: How can management ensure compliance with legal and regulatory requirements?**

**Jeremiah:** With legal and regulatory compliance there are three broad areas that SAP solutions can address:

1) Safety and health. Here we try to look at management systems requirements from, say, OSHA. We look at different types of systems that are required for safety, certainly with regard to prescriptive reporting, injury forms and other things that are easy to take for granted. SAP automates this process, drawing data from across the manufacturing processes.

2) Environmental requirements. SAP helps manufacturers comply with regulations such as REACH and ROHS in the EU. If a chemical is harmful to the environment and banned in the EU, our software helps companies ensure that this chemical is not included in any part of the product lifecycle from design to sourcing.

3) Legal and regulatory requirements. SAP software manages the rest of the business processes, giving companies the ability to perform a compliance check. It also answers questions: Am I legally allowed to sell this product? Am I registered? On purchasing side: Do I have the ability to automate security checks? Can I automate the reporting?

**PS: How does SAP stay on top of industry news and current events?**

**Jeremiah:** First off, we make a tremendous effort to recruit the best talent possible. Our team is made up of seasoned practitioners with decades of professional working experience, some not originally from software.

We also follow trade publications such as *Professional Safety*. We definitely stay up to date in the blogosphere with regard to safety and environment health and safety management. We have a large team that follows legislative activities. Most importantly, through our customer coinnovation processes, we can collaborate with customers. We visit customers and watch their employees work so that we can get an idea of their key needs and what changes they need. We are in constant communication with customers.

Jeremiah Stone leads SAP’s solution management teams for Operational Risk Management and Sustainable Supply Chains and Products. Prior to SAP, he worked in civil aviation, where he developed real-time clear air turbulence detection systems.